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A DESCRIPTIVE STUDY OF
ART KNOWLEDGE AND ART ATTITUDES AT THE GRADE IX LEVEL
IN SELECTED ALBERTA SCHOOLS, 1967-68

BY



MELBA SADLER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Descriptive Study of Art Knowledge and Art Attitudes at the Grade IX Level in Selected Alberta Schools, 1967-68" submitted by Melba Sadler in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

The purpose of this study was to determine whether there were any differences in student attitudes toward art and student knowledge about art resulting from exposure to three art programs. These programs provided differing quantities of instruction in art appreciation at the Grade IX level in Alberta schools for the 1967-68 school year. Art appreciation in this study included five art-related areas, namely, art history, analysis of art works, visits to galleries and museums, design elements and principles, and environmental studies.

Art Program 1 was a production-oriented program wherein up to 20 per cent of class time was devoted to art appreciation; it was presented to eleven classes, or 247 students. Art Program 2 was also a production-oriented program, wherein 20 to 32 per cent art class time was set aside for instruction in art appreciation, and was undertaken by eleven classes, or 241 students. Twelve classes, or 310 students, were involved in Art Program 3, which was an appreciation-oriented program where "33 per cent and over" of art class time was devoted to instruction in art appreciation. The students in Art Programs 1, 2 and 3 were referred to as Groups 1, 2 and 3 respectively, throughout the study.

The findings showed that the amount of instruction in art appreciation did not appear to have any bearing on the performance of the three groups of students on the Eisner Art Information Inventory. Test performance by Groups 1, 2 and 3 was similar in nature, and fell below the mean of 30.39 for Grade IX students in Eisner's study. According to Eisner, Grade IX students should obtain a mean corresponding to 50 per cent of the questions on the Eisner Art Information Inventory. Groups 1, 2 and 3, in this study, received the equivalent of 42 per cent, 42 per cent and 44 per

cent respectively.

The females in each of the three groups of students received higher means on the Art Information Inventory than did their male counterparts. Test performance, however, by each of the three pairs of male-female subgroups was similar in nature.

With regard to art attitudes, the amount of instruction in art appreciation did not appear to have any bearing on the performance of Groups 1, 2 and 3 on the Eisner Art Attitude Inventory. Test performance by Groups 1, 2 and 3 was similar in nature, or 171.23, 172.49 and 176.44 respectively, all below the established norm of 180 for the Art Attitude Inventory. Groups 1, 2 and 3 exhibited an overall attitude toward art that was "middle-of-the-road" to negative.

The females in each of the three groups received higher means on the Art Attitude Inventory than their male counterparts, which indicated a more positive attitude toward art on the part of the females. Test performance, however, by each of the three pairs of male-female subgroups was similar in nature.

As to the relationship between art information and art attitudes, the findings showed, for Groups 1, 2 and 3, small but positive coefficients of correlation, or .279, .201 and .336 respectively.

The results obtained from a preliminary questionnaire to teachers showed that the art programs at the Grade IX level for the 1967-68 school year were art production oriented in the sixty-two participating Alberta Schools.

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CHAPTER I

THE PROBLEM

Introduction

The history of art education reveals that the middle and lower socio-economic groups in our North American society have possessed and still do possess somewhat negative attitudes toward art, and particularly toward art appreciation. Long working hours and lack of money prevented them from participating in those art activities taken for granted by the wealthy leisure class--the collection and enjoyment of art objects for their own sake, not merely for their usefulness.

The inventions of modern science and technology have alleviated or eliminated the drudgery of long hours of hard work. As people acquire more leisure time and money, they buy more things for their own enjoyment and must therefore make many aesthetic judgments. In order to make sound aesthetic judgments they must become more knowledgeable about art and the contributions of the artist, both in the sense of his personal donations to art and of his relevance to the society or civilization of which he forms a part. Deliberate instruction in art appreciation has therefore become a necessity.

As every segment of our society comes in contact with art, attitudes toward art and artists undergo a change for the better--negative attitudes become positive,¹ although the "art as frill", "art for leisure" and "artist as deviant" attitudes still exist today to a certain extent.

¹June K. McFee, Preparation for Art (San Francisco: Wadsworth Publishing Company, Inc., 1961), pp. 115-16.

The schools in our society were created to impart knowledge, values and skills to the younger generation, as well as to train them to think creatively. It is also their responsibility to develop and nurture in young people, at the adolescent level in particular, those attitudes which reflect a positive and cumulative involvement with all aspects of art--the productive, the critical and the appreciative. Adolescence is a period of great physiological and psychological change, of heightened sensitivity, and is often characterized by a tendency to reach out for new relationships and identifications with the adult world and its promise of freedom and independence. At the same time there is a striving for acceptance by one's peers. It is, therefore, at the adolescent level that schools should become intensely concerned with promoting the growth of knowledge about art and artists, and at the same time, developing and fostering positive attitudes toward art and artists.

This study will try to assess student knowledge about art and student attitudes toward art at the adolescent level.

Statement of the Problem

The purpose of this study is to determine whether there are any differences in student attitudes toward art and student knowledge about art resulting from exposure to three art programs involving different quantities of instruction in art appreciation at the Grade IX level in Alberta schools for the 1967-68 school year.

One art program concentrated only on producing art. The second art program devoted approximately one-quarter to one-third class time to art appreciation, and the third program devoted approximately one-third to one-half class time to art appreciation. Art Programs 2 and 3

devoted the remainder of their class time to the production of art.

Each of the three art programs, 1, 2 and 3, constitutes a group of Grade IX students from several Alberta secondary schools. These will be referred to, in this study, as Groups 1, 2 and 3 respectively.

The research for this study will be conducted in two parts. Part I will consist of the distribution, return and analysis of the Teacher Questionnaires while Part II will include the administration, return and analysis of the Eisner Art Information and Attitude Inventories.

The research in Part I will be undertaken to attempt to answer the following questions:

1. What was the general nature of the Grade IX art programs in specific Alberta schools for the 1967-68 school year, with particular reference to art appreciation?

2. (a) Which art activities, according to the Grade IX art teachers, lent themselves most readily to the inclusion of instruction in art appreciation?

- (b) Which art activities made the greatest contribution toward the development of a good art program at the Grade IX level?

The research in Part II will be undertaken to attempt to answer the following questions:

3. Did the art programs offered have any bearing on the distribution of art information scores obtained by the three groups of students on the Eisner Art Information Inventory?

4. Did any differences in the distribution of art information scores occur between the males and females within and between each of the three groups of students?

5. Did the art programs offered have any bearing on the distribution

of art attitude scores obtained by the three groups of students on the Eisner Art Attitude Inventory?

6. Did any differences in the distribution of art attitude scores occur between the males and females within and between each of the three groups of students?

7. Did there appear to be any relationship between art attitude and art information scores for the three groups of students obtained on the Eisner Art Attitude and Information Inventories?

DEFINITION OF TERMS

The investigator has, for the purpose of this study, operationally defined certain terms as follows:

Art Appreciation. Art appreciation is the process of learning about art in order to understand the artistic expression of others. It is the development of the ability to perceive the relationship of the parts of an art form to each other and to the whole, as well as to the idea expressed. Art appreciation comprises the following five art-related areas: (1) the study of the elements and principles of design, (2) art history, (3) analysis of art works, (4) visits to galleries and museums, and (5) environmental studies. Art appreciation is concerned with knowledge about art and is not art-producing in the same sense as are, for example, ceramics, painting and sculpture.

Art Production. The learning activities and experiences that are involved in making art objects.

Good Art Program. The succession of learning activities and

experiences, suitable for a student at the Grade IX level, that are involved in producing and appreciating art.

Environmental Studies. The understanding and appreciation of many forms of architecture, interior and exterior design, both traditional and contemporary.

Art Attitude. State of mind, behavior, or conduct regarding art, as indicating opinion or purpose. It is an individual's feelings about art and related aspects of art.

RATIONALE FOR THE STUDY

The researcher agrees with Eisner that there is a need in our schools for the assessment of student knowledge about art and student attitudes toward art.² To date there have been no studies conducted in Alberta schools with respect to these two aspects of art.

Although our society's attitudes toward art and the artist are becoming less negative, nevertheless art is still considered on a utilitarian basis because our culture tends to believe that only practical activities are of value,³ and the artist is considered to be an irresponsible bohemian.⁴ A creative person, be he artist or scientist, possesses

²E. W. Eisner, "The Development of Information and Attitudes Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), p. 43.

³Donald Arnstine, "Needed Research and the Role of Definitions in Art Education", Studies in Art Education (Washington: National Art Education Association, Autumn, 1965), p. 11.

⁴Irving Kaufman, Art and Education in Contemporary Culture (New York: The MacMillan Company, 1966), p. 23.

certain traits or characteristics that our society regards with suspicion, and teachers seem to reflect this suspicion.⁵ Teachers prefer the orderly, less demanding child to the questioning, highly creative one.⁶

In addition, pressures for peer conformity are at their peak during adolescence and peer groups have developed powerful sanctions against non-conforming behavior by any of their members.⁷ Because of the high value placed on being ordinary and cooperative, a child soon learns to conform and may form a stereotype of the artist as a deviant.

There is in our society, and in the adolescent male sub-culture in particular, the notion that art is a feminine activity.⁸ Perhaps the adolescent male is unaware that all the great artists of the past were males.

Another obstacle to the acceptance of art as a school subject is the attitude that academic subjects such as mathematics and science should take priority over education in the arts. While science and technology hold a more prestigious position today than does art because they constitute a means of extending knowledge and control, and increasing our comfort and well-being, nevertheless in our rapidly changing world where transportation and communication technology have enabled the peoples of

⁵Jean Grambs, Schools, Scholars and Society (Englewood Cliffs: Prentice-Hall, Inc., 1965), p. 28.

⁶E. Paul Torrance, Guiding Creative Talent (Englewood Cliffs: Prentice-Hall, Inc., 1962), p. 106.

⁷E. Paul Torrance, Rewarding Creative Behavior (Englewood Cliffs: Prentice-Hall, Inc., 1965), p. 188.

⁸Paul Edmonston, "Research: Some Implications for Art Education in the Junior High School", Art Education in the Junior High School, J. A. Michael, editor (Washington: National Art Education Association, 1964), p. 99.

the world to rub shoulders with one another, there is a need to understand the creative art expression of each and every culture of the world, for every culture has its unique forms of artistic expression.

This need places a tremendous responsibility on the art teacher, who must provide students with art experiences that will develop in them a fuller and richer appreciation for the creative expression of others as well as for their own. If we do not enlarge the training of perceptive responses to all forms of art, we will "produce a mass of artistic illiterates".⁹ We are living in an age of planned obsolescence where one has only to browse over the merchandise in our shopping centers to see how standardized all the goods are. Ziegfeld points out that "we are surrounded by evidences of an appallingly low level of taste".¹⁰

Art appreciation should include, not only the traditional forms of art--painting, sculpture and architecture--but the art of our contemporary world: commercial, industrial and interior design.¹¹ These must be related to the adolescent's own creative art expression and that of his peers.

Deliberate education in art appreciation is needed today, for there is no guarantee that genuine appreciation will result from the manipulation of art materials alone. According to de Francesco,

the enrichment of life by actual planning and purposing with the children is much more tenable than the assumption that appreciation and values are by-products of painting or drawing activities. For some pupils this may be true, for the many it must be planned.¹²

⁹Carl Reed, Early Adolescent Art Education (Peoria: Charles A. Bennett Company, 1957), p. 21.

¹⁰Edwin Ziegfeld, "The Current Scene: Problems and Prospects for Art Education Today", Report of the Commission on Art Education, J. Hausman, editor (Washington: National Art Education Association, 1965), p. 6.

¹¹Kaufman, op. cit., p. 455.

¹²Italo de Francesco, Art Education: Its Means and Ends (New York: Harper and Brothers, 1958), p. 245.

Because of the adolescent's state of physical development and its accompanying intellectual, social, emotional and psychological changes, art educators tend to advocate a junior high school program geared to the productive aspect of art with particular emphasis on individual experimentation, exploration and discovery. The scope of art education at the junior high school level should be expanded in the areas of art appreciation and trained perception of art because "only a relatively few remarkable individuals may achieve genuine art".¹³ Very few individuals will become practising artists, yet every individual in our society makes aesthetic judgments many times a day. To develop aesthetically literate consumers of art is one of the central tasks of art education.¹⁴

The adolescent is vitally interested in personalities and this interest in personalities

is a door to experiences rich in themselves, which we have no reason to discourage. In practice, one of the best ways to interest adolescents in art is by way of the artist's life and character. Properly followed up, this approach can lead him to a new interest in the art work itself, as he finds it possible to sympathize with the artist's desire to create that sort of thing and to sense the difficulties he had to overcome in creating it.¹⁵

This is hard to reconcile with the statement made by one teacher responding to the Questionnaire, that anything other than art-producing activities would be wasted on all but five per cent of the class.

¹³Kaufman, op. cit., p. 453.

¹⁴Elliot W. Eisner, "American Education and the Future of Art Education", Art Education, the Sixty-fourth Yearbook of the National Society for the Study of Education, W. Reid Hastie, editor (Chicago: The Univ. of Chicago Press, 1965), p. 314.

¹⁵Thomas Munro, "Adolescence and Art Education", Art Education, Its Philosophy and Psychology (New York: The Liberal Arts Press, 1956), p. 257.

An art teacher is a tastemaker, even though taste is to a certain extent an individual matter affected by the attitudes and values of one's own group. An art teacher must constantly re-examine his own feelings and attitudes toward art, for he continually communicates to his students those feelings and attitudes. Whether he reinforces, in the classroom, society's somewhat negative attitudes toward art and the artist, or whether he encourages students to question and evaluate their own decisions regarding art should be a matter of concern to art educators who are genuinely interested in the development of knowledge about art and more positive attitudes toward all forms of artistic expression. To develop an understanding and appreciation of man's creative expression is a most important aim of art education.

In her definition of visual art, Abell stresses this need for understanding--of self, of our environment, and of others. She says,

visual art is the expression of one's thoughts, emotions, and perceptions in organized form. It is a statement of one's individual relationships to one's self, to one's environment, and to other people.¹⁶

One cannot accept this definition without realizing the importance of understanding art and developing favorable attitudes toward it. If an individual's attitude toward art is an expression of his attitude toward himself, his environment, and others, then the importance of developing favorable attitudes toward, and greater understanding of visual art can never be over-stressed.

While it is important in art education research to ask how to produce

¹⁶Ellen D. Abell, "The Art Teacher Works With the Junior High School Pupil", Art Education in the Junior High School (Washington: National Art Education Association, 1964), p. 29.

sculptors and painters, "it seems to make the most sense to find out how to help (learners) enjoy art more and understand it better."¹⁷

There is a need for descriptive studies in art education where the investigator does not introduce an experimental treatment but rather attempts to measure existing conditions and to identify regularities among these conditions.¹⁸

LIMITATIONS OF THE STUDY

This study was limited to the Grade IX level of the Junior High Schools in the Province of Alberta for the 1967-68 school year.

This research attempts to go into the nature of the Grade IX art programs to the extent of trying to ascertain the amount of class time that was devoted to those art activities that make the greatest contribution to the teaching of art appreciation.

It is recognized by the researcher that the Questionnaire Method limits a study by inviting, to a certain extent, the subjective rather than the objective response. However, outside of six questionnaires which were not completed in full, and six returned with the notation that art was not being taught at the Grade IX level, the remaining 62 questionnaires appear to have been completed with reasonable care and objectivity by the participating teachers.

¹⁷Arnstine, op. cit., p. 5.

¹⁸Elliot W. Eisner, "Toward a New Era in Art Education", Studies in Art Education (Washington: National Art Education Association, Spring, 1965), p. 57.

It was financially impossible to cover all the Grade IX art classes in Alberta during the 1967-68 school year.

OVERVIEW

Chapter II is devoted to a review of literature and research related to the study.

Chapter III outlines the design of the study and the methods used for the collection and treatment of the data.

Chapters IV to VII set forth, in detail, findings derived from the Questionnaire to Teachers and the Eisner Art Information and Attitude Inventories.

Chapter VIII summarizes the findings for each of the questions posed in Chapter I, reports the conclusions from the entire study, and contains recommendations for future research based on the findings of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

This chapter presents a review of related literature and research which forms the background for this study. The material falls under four sub-headings: the first presents a brief over-view of the development of art appreciation and attitudes toward art in the United States; the second traces, very briefly, the development of Canadian art education, with particular reference to art appreciation; the third focuses on research related to certain aspects of art appreciation and student attitudes toward art appreciation. Conclusions drawn from the related literature and research are summarized in the final section of this chapter.

The Development of Art Appreciation and Attitudes Toward Art in the United States

The history of art education in America reveals that art appreciation first came into being as picture study in the public schools at the turn of the twentieth century. Nineteenth century American art education was designed to serve two very practical purposes. Its first and main purpose was to improve the vocational skills of middle and lower class children.¹ The belief was that as students developed skills in geometric and mechanical drawing, they would become better equipped to meet the demands of an increasingly industrial society. Some teachers believed that if the skills employed to draw geometric designs improved one's hand-eye

¹D. W. Ecker and E. W. Eisner (joint editors), "What is Art Education?", Readings in Art Education (Waltham: Blaisdell Publishing Company, 1966), p. 2.

coordination, then these same skills could be utilized to develop better writing habits.

Art served another practical function in the schools at this time. For upper-class young ladies it was a symbol of culture and refinement.² It meant the finer things in life and included, for these future debutantes, not only drawing but fancy stitchery, sketching, and painting on velvet and on glass.

The majority of the early pioneers who came to North America to seek new homes had neither the time nor the money to spend on other than the basic necessities of everyday life. Many of these people brought with them a Puritan heritage which was not hospitable to art and leisure, an attitude of "hard work and contempt for culture"³ that is still with us to a certain extent today.

The consequences of the Industrial Revolution of the nineteenth century brought forth, for the middle and lower classes, the prospect of shorter working hours, more money and leisure time in which to enjoy life. It was in this atmosphere that art education became concerned with factors other than a practical use for the artistic skills of middle and working class children. It became concerned with "helping all children to appreciate beauty in nature and in art".⁴ Although children were exposed to art works, it is interesting to note that these were most likely to be

²Ibid., p. 2.

³John A. Diffily, "Art Appreciation and Attitude Change: An Interdisciplinary Contribution to the Development of Aesthetic Response in College Students" (unpublished Ph.D. Dissertation, Columbia University, 1966), pp. 24-25.

⁴Ecker and Eisner, op. cit., p. 5.

the works of Renaissance artists, which were studied in order to develop

in the children of our schools an appreciation of the great masterpieces of art so that they may know the joy that comes from such an appreciation and so that their ideals may be influenced by the patriotism, the sympathy, the courage, the piety, and the beauty which the great artists of different ages have given to the world.⁵

Art education served moral and ethical as well as practical purposes.

The fine arts were found to be essential to the growth of our culture. The 1893 World's Fair "dazzled" visitors with its many reproductions of Greek and Roman architectural and sculptural forms.⁶ American sculptors, architects and painters were encouraged to copy these classical motifs and to produce works based on these motifs.

The dominant influence on art education in America during the first two decades of the twentieth century was Arthur Wesley Dow's Principles of Composition.⁷ Dow's concern with the elements and principles of composition was reflected in many picture study approaches to art appreciation in the public schools of America during the first quarter of this century.⁸ While Dow's theory almost totally ignored color and the third dimension, nevertheless it did pave the way for art teachers to begin to understand art works on the basis of their organizational structure, and

⁵Ibid., p. 6.

⁶Frederick M. Logan, "Development of Art Education in the Twentieth Century, U.S.A.", Report of the Commission on Art Education (Washington: National Art Education Association, 1965), p. 50.

⁷Frederick M. Logan, Growth of Art in American Schools (New York: Harper and Brothers, 1955), p. 109.

⁸Orville M. Winsand, "Art Appreciation in the Public Schools from 1930 to 1960" (unpublished Ph.D. Dissertation, The University of Wisconsin, Ann Arbor, 1961), p. 17.

thus enabled them to pass on these principles to their students.

Belle Boas reiterated Dow's theory that it was possible to develop intellectual understanding of works of art through the study of the aesthetic qualities of the work, the qualities being "fine spacing, interesting composition, color harmony, and rhythm of lines and masses."⁹

The picture study analysis approach of the twenties often resulted in line, value and color studies of art works but neglected the importance of the "parts-to-whole" relationship.¹⁰ This type of dissection was viewed with some disfavor by eminent art educators of the time.

Considerable effort was expended in the twenties to bring art principles closer to everyday life by expanding the scope of art to include not only the traditional art forms such as painting, sculpture and architecture, but objects in one's immediate environment as well.¹¹ It was felt that an aesthetically pleasing environment contributed immeasurably to the cultivation and development of art appreciation.

Progressive education exerted a powerful influence on the art education programs of the late twenties and throughout the thirties. It was felt that direct contact with art materials and techniques would result in the growth of individual creative self-expression and that art appreciation would be a natural outgrowth of this art experience.¹²

Interest in art increased during the depression years of the thirties. "People went to galleries, municipal concerts, and library discussion groups", said Logan, "partly because they could not afford

⁹Ibid.

¹¹Ibid., p. 19.

¹⁰Ibid., p. 18.

¹²Ibid., p. 22.

more expensive forms of entertainment."¹³

"Art for all" became the watchword of the thirties. As a result, increased amounts of curriculum space were allocated to art in the secondary schools of the United States.¹⁴ The schools turned to "teaching for appreciation, the watchword being 'appreciation for the many; technic for the few.'" ¹⁵ Few people would become producers of art but many would appreciate art; art education should serve this majority. It was suggested at this time that schools should be responsible for elevating and developing standards of aesthetic value in society.¹⁶

In 1934 Munro called for more "consideration of the psychological aspects of appreciation and development."¹⁷ He believed that art appreciation was a psychological process, an individualized response to the aesthetic qualities of a work of art. Each student should therefore be encouraged to arrive at his or her own aesthetic standards.¹⁸

The Owatonna Project¹⁹ (1933-38), directed by Edwin Ziegfeld and financed by the Carnegie Foundation, illustrates that art can become a way of life and raise the aesthetic standards of an entire city--in

¹³Frederick M. Logan, "Development of Art Education in the Twentieth Century, U.S.A.", Report of the Commission on Art Education (Washington: National Art Education Association, 1965), p. 55.

¹⁴Winsand, op. cit. p. 36.

¹⁵Ibid.

¹⁶Ibid., p. 35.

¹⁷Thomas Munro, "Methods of Teaching Art Appreciation", Western Arts Association, Vol. XVIII, No. 4, 1934, p. 73, cited by Orville M. Winsand, op. cit., p. 40.

¹⁸Winsand, op. cit., p. 34.

¹⁹Frederick M. Logan, Growth of Art in American Schools, (New York: Harper and Brothers, 1955), pp. 185-191.

business, the home, the church, and the school. This project was carried out in the small, midwestern city of Owatonna.

Major advances in the stature of art in society were handicapped in the 1940's by the advent of World War II. Nevertheless there was a renewed concern for the individual child, his needs and interests, and the importance of art education to personality growth and development. Art educators of the period believed that a deliberate attempt should be made to make art appreciation a "conscious part of one's development, the overt attempt to teach with respect to aesthetic affairs."²⁰

In 1942 D'Amico stressed that the creative experience, not the finished art product, was the "significant purpose" of art education.²¹ With regard to art appreciation he wrote that

Art is an expression of a culture and society, and to understand or to appreciate art fully is to know and understand the culture and society which created it.²²

The real purpose of art appreciation, said Lowenfeld, was to make an individual sensitive to the values of a work of art "in order that he can relate himself to it meaningfully".²³ To analyze art works or to "learn to understand" them were not, for him, the true aims of art appreciation.

The post-World War II period saw a gradual revitalization of art

²⁰Winsand, op. cit., p. 80.

²¹Victor D'Amico, Creative Teaching in Art (International Textbook Company, 1942), p. 25.

²²Victor D'Amico, "The Museum of Art in Education", Art Education Today, 1940, p. 51, cited by Orville M. Winsand, op. cit., p. 63.

²³Victor Lowenfeld, Creative and Mental Growth (New York: The MacMillan Company, 1957), p. 33.

appreciation programs in American schools.²⁴ The Progressive attitude, that appreciation was a natural result of individual art experience, was gradually displaced by requests for deliberate education in art appreciation. De Francesco pointed out that if art was to affect the lives of every man, woman and child then "appreciation must be attacked deliberately"²⁵ in order to raise the level of taste of all individuals and so produce discriminating consumers of art. Art appreciation could not be caught, it must be taught.

While he advocated deliberate education in appreciation, de Francesco was aware of the dichotomy that existed between art production and appreciation when he pointed out that

the production of art and the development of a feeling of warmth toward and genuine enjoyment of art objects on the part of all individuals are closely related activities. In practice, however, the problem of aesthetic appreciation has often been considered an activity independent of production.²⁶

He went on to say that

In the process of evaluating, shaping and reshaping, there is enjoyment. Furthermore, a doer is often capable of appreciating, passing judgment on, or evaluating the production of others.²⁷

The subject matter must be wide, said de Francesco, and include "appreciation of painting, sculpture, architecture, and the many types of design that affect life and living".²⁸

²⁴Winsand, op. cit., p. 101.

²⁵Italo de Francesco, Art Education: Its Means and Ends (New York: Harper and Bros., 1958), p. 13.

²⁶Ibid., p. 11.

²⁷Ibid., p. 12.

²⁸Ibid., p. 13.

In recent years Eisner has stressed the need for a well-rounded education in art, which should include not only the productive but also the critical and appreciative aspects.²⁹

McFee concurs with this attitude to the extent that she recommends that art appreciation should not be a "study of something apart--a subject in which a student learned about art but did not use and become involved with it."³⁰ The aim of art education is to produce aesthetically literate citizens who, through familiarity with design elements and principles, become capable of independent aesthetic judgments and to whom producing and appreciating art has become part of a way of life.

Art appreciation should not be confined to the traditional forms of visual art, as in an historical context, said Kaufman.³¹ It should be all-inclusive, and include the making of art, appreciating what others have created, and analysis and sensible study of great works of art in many forms and media.

There appears to be a consensus of opinion among art educators today that art appreciation should not be a "thing apart" from art production, for art production, in itself, is not sufficient to produce aesthetically discriminating citizens. Every individual in our society must make aesthetic judgments many times a day. It is therefore the responsibility of art educators to train our future citizens to become

²⁹Elliot W. Eisner, "Curriculum Ideas in a Time of Crisis", Art Education (Washington: National Art Education Association, October, 1965), p. 7.

³⁰June K. McFee, Preparation for Art (San Francisco: Wadsworth Publishing Company, 1961), p. 180.

³¹Irving Kaufman, Art and Education in Contemporary Culture (New York: The Macmillan Company, 1966), p. 451.

aesthetically sensitive to the countless art forms, both natural and man-made, that surround them.

The Development of Art Education in Canada

In 1951 Forbes³² traced the development of art education in Canadian schools. A brief summary of this study follows.

Art education in the public schools of Canada has followed the same general trend as in the United States, a practical and utilitarian one in which art concerned itself primarily with drawing and representation.

Canada's first school art program, set up in 1850 in Ontario schools, consisted of map-drawing for the development of technical skills in a country which was rapidly becoming industrialized.

It was not until 1920, when Arther Lismer, a well-known Canadian painter, became Educational Supervisor at the Toronto Art Gallery, that art education received its first real boost as a result of his new approach based on the needs and abilities of the child.

Art education on the Canadian scene has suffered for several reasons: (1) a lack of adequately trained art personnel, (2) inadequate facilities, equipment and materials, and (3) a need for a more favourable attitude toward art on the part of educators and the public.

Art education in the public schools of Alberta began as map-drawing during the first decade of the twentieth century. Color was also included as an area of study by many teachers who felt that art was more than learning to draw. In addition to map-drawing and color, children

³²J. A. Forbes, "Art Education-Its Cultural Basis, Its Development and Its Application in Alberta Schools" (unpublished Master's Thesis, The University of Alberta, Edmonton, 1951).

were taught to draw geometric forms and countless variations of these forms. Art meant imitation, the learning of skills and techniques as well as rule and theory memorization. Emphasis was placed on the product and not on the process. Accuracy of representation was the basis on which an art work was judged. There was no reference whatsoever to aesthetic qualities.

This type of art program continued well into the twenties with only a few minor changes, particularly in the area of personal expression. Creativeness was one of the aims of art education, but this was not put into practice in the schools.

It was in the twenties that Dow's "design method" of teaching art and art appreciation slowly invaded our Alberta art programs.

There were several revisions of the existing art program over the years but apparently teachers continued to use the same methods of teaching art, namely the learning of skills and techniques, drawing and representation.

In 1938 an Alberta Inspector of Schools expressed his disappointment with the art program when he stated that

in spite of the intent of the revised course in art to stress the appreciation of art in our everyday lives and surroundings, a large number of teachers have not changed their procedures from the actual drawing and painting of the traditional sets of "plates."³³

Forbes' study showed that art appreciation in the thirties was picture study, and the pictures were chosen primarily for their subject matter.

The following statements seem to sum up the actual state of art education in the public schools of Alberta up to 1951:

³³Ibid., p. 65.

The students approach art (in university) in a stiff, stereotyped and unimaginative way. Also they are burdened with a defeatist attitude that only points to an art program that must ignore, indeed must discourage free expression and aesthetic values.³⁴

By the year 1951 "art had not yet made its contribution to Canadian society", Forbes concluded.³⁵

A later study by Cassidy revealed however that by the sixties better art programs were becoming available in the senior high schools of Alberta, due to better teacher-training programs in art.³⁶ Yet it is interesting to note from the study that as the number of art courses included in teacher-training increased, there was a tendency for teachers to spend more time on studio learnings and less time on the theory of artistic techniques and art history. No mention was made about the status of art appreciation in these art programs, though it was noted that the more courses an individual took in art during his university training, the more likely he was to favour a sequential approach to art history.

School boards in some of the major cities of Alberta now employ art supervisors and consultants to direct and supervise their art and art appreciation programs, a step in the right direction if art is to take its rightful place in the schools.

In addition, museums and galleries are becoming "instruments for enhancing education in art",³⁷ another hopeful sign that society is coming to recognize the value of art and art appreciation for personality growth.

³⁴Ibid., p. 77.

³⁵Ibid., p. 52.

³⁶Neil Cassidy, "Some Relationships between Art Teacher Qualifications and the Art Programs offered in the Senior High Schools of Alberta" (unpublished Master's Thesis, The University of Alberta, Edmonton, 1967).

³⁷Milton A. Halvarson, "A Study of the Educational Programs of Canadian Art Museums and Galleries" (unpublished Master's Thesis, The University of Alberta, Edmonton, 1967), p. 11.

Research Related to Art Appreciation and Student Attitudes Toward Art

The Junior High School Curriculum Guide for Art³⁸ (September, 1955) page 5, lists, as one of the five general objectives of art education, the "capacity for appreciation". This objective, together with the four remaining general objectives, endeavours to emphasize (a) understandings, (b) skills, abilities and habits, and (c) attitudes.

General Objective 3, "the capacity for appreciation", states that the beauty provided by nature and man should be enjoyed by all, regardless of social, economic, or intellectual standing. Attention should be called to the best in all fields: painting, sculpture, drawing, architecture, motion pictures and magazine production. The importance of good design and color in the environment and dress should be observed.³⁹

Charles' study revealed that the order of attainment of the art aims in the Junior High Schools of Alberta was, in 1958, as follows:

1. to develop an understanding of design, drawing and color,
2. to develop self-expression,
3. to develop creative ability in all children,
4. to develop increased powers of observation and visual judgment,
5. to develop the special abilities of talented children,
6. to develop a capacity for appreciation, and
7. to develop socially acceptable habits and good citizenship.

It is interesting to note that Aim 3 "to develop a capacity for appreciation" was ranked sixth out of a total list of seven preferred

³⁸The Junior High School Curriculum Guide for Art is under revision at present and will stress the need for a greater emphasis to be placed on the development and cultivation of art appreciation.

³⁹Junior High School Curriculum Guide for Art, Province of Alberta, Department of Education, September 1955, p. 5.

aims, by both teachers and superintendents.⁴⁰ This situation is difficult to understand, for if students have developed "some understanding of design, drawing and color", an "increased capacity for self-expression and creative ability", along with "increased powers of observation and visual judgment", it seems reasonable to assume their "capacity for appreciation" would have developed to a higher degree. Charles' study gives no reason for this low ranking of the "capacity for appreciation".

Psychologists and educators agree that a good attitude is essential if efficient teaching and learning are to take place. With this in mind, Pohl investigated the attitudes of Art 91 students toward art in British Columbia High Schools for the 1961-62 school year.⁴¹ The good attitude, as defined by Pohl, meant willingness to see things creatively, personal involvement of the student in art, independence on the part of the student, and participation in extra-curricular readings and activities related to art. Pohl concluded (1) that teachers should pay more attention to the learning attitudes of their students, and (2) teachers are tastemakers and "should make themselves aware of the effect they have upon the attitudes of their pupils."⁴²

The art teacher plays a strategic role in establishing art values in the classroom. Like Pohl, McFee feels that the art teacher is a taste-maker,⁴³ and his manner, technique, and attitude toward art play

⁴⁰Henry J. D. Charles, "An Evaluation of Some Aspects of Art Education in the Province of Alberta" (unpublished Master's Thesis, The University of Alberta, Edmonton, 1958), p. 114.

⁴¹Lorraine A. Pohl, "A Study of the Art Attitudes of Art 91 Students in British Columbia High Schools, 1961-62" (unpublished Master's Thesis, The University of British Columbia, 1963).

⁴²Ibid., p. 76.

⁴³McFee, op. cit., p. 35.

important roles in influencing and establishing student attitudes toward art.

According to Kuhn, there is a definite relationship between a student's attitude level and the amount of art instruction he has received.⁴⁴ This study shows that the aesthetic attitudes of college students toward contemporary painting were favorably influenced over a period of only one semester. The instructor who was oriented toward contemporary painting was more effective than the traditionally-oriented one.

Similar findings by Doerter⁴⁵ showed that in one semester college students were influenced unintentionally, into a stylistic painting expression similar to that of their instructors.

According to Hogg and McWhinnie, student attitudes toward art at the elementary level seemed to be influenced as much or more by what was said and done about art in the home than in the school.⁴⁶ If parents' attitudes toward art were negative, their children's attitudes toward art were negative also. If the parents thought of art as being important, their children showed positive attitudes toward art.

Before attitudes to art can be changed, says Diffily, teachers must

⁴⁴Marshall S. Kuhn, "The Effect of Art Instruction on the Attitudes of College Students Toward Contemporary Painting" (unpublished Ed. D. Dissertation, Syracuse University, 1963).

⁴⁵James M. Doerter, "Influence of College Art Instructors Upon Their Students' Painting Styles" (unpublished Ed.D. Dissertation, The Pennsylvania State University, 1962).

⁴⁶James C. Hogg and Harold J. McWhinnie, "A Pilot Research in Aesthetic Education", Studies in Art Education (Washington: National Art Education Association, Winter, 1968), p. 59.

familiarize themselves with society's attitudes toward art and the artist and the reasons for these attitudes.⁴⁷ The "art for the rich" attitude is still widespread today among the middle and lower socio-economic groups in our society.⁴⁸ In addition, differing attitudes are held toward modern and traditional art. We are tolerant of traditional art, says Diffily, and somewhat hostile to modern art.⁴⁹ When an individual cannot identify with modern art, the result is frustration and a reinforcement of already present negative attitudes.⁵⁰ When an individual is hostile toward art, or when he is merely tolerant of it, he cannot appreciate it.

Not only must the art teacher be aware of society's attitudes toward art, but the method he himself uses to present material to his class is of importance. For example, the "chronological survey method" of teaching art appreciation tends to reinforce, rather than alter, the negative attitudes that students have toward art appreciation.⁵¹

Annis discovered that the greatest change in student art attitudes and appreciations took place when the more active "discussion", "materials experimentation", and "discussion-materials" methods of teaching art

⁴⁷John A. Diffily, "Art Appreciation and Attitude Change: An Interdisciplinary Contribution to the Development of Aesthetic Response in College Students" (unpublished Ph.D. Dissertation, Columbia University, 1966), p. 34.

⁴⁸Ibid., pp. 34-35.

⁴⁹Ibid., p. 44.

⁵⁰Ibid., p. 19.

⁵¹Ibid., pp. 149-153.

appreciation were utilized.⁵² The traditional passive "lecture-slide" method showed the least positive gains in art attitudes and appreciations.

According to Eisner,⁵³ insufficient attention has been paid in our secondary schools to (1) the development by the student of basic knowledge about art, and (2) student attitudes toward art. In a study of 1488 "art-interested" Grade IX-to-college level students in eighteen American educational institutions in six states who were tested by means of the Eisner Art Information and Attitude Inventories, Eisner found that on the Information Inventory the mean score for both sexes at the Grade IX level was 30.39 (28.06 for males, 31.50 for females), while the Attitude Inventory showed a mean score for both sexes of 197.14 (189.05 for males, 200.98 for females). That art in our culture is a feminine endeavour seems to be borne out by the higher scores received by the females on both the Information and Attitude Inventories.

As to the relationship between art attitude and art knowledge, Eisner's findings show that while there is a positive, significant relationship, nevertheless it is small. It appears that contentment with one's school and home art experiences does not guarantee scholastic success in art, nor does scholastic success in art mean satisfaction with one's art experiences.

A search of related literature and research has not revealed any research dealing with art appreciation and student attitudes toward art at the junior high school level in Alberta.

⁵²Eleanor A. Annis, "The Effect of Certain Teaching Methods on College Students' Art Attitudes and Appreciations" (unpublished Ed. D. dissertation, The Pennsylvania State University, 1961).

⁵³Elliot W. Eisner, "The Development of Information and Attitude Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Autumn, 1966), p. 46.

Summary of the Review of Related Literature and Research

An overview of the history of art appreciation in North America has revealed the influence and contribution not only of artists, philosophers, psychologists and educators, but of society as a whole toward art appreciation. While society's attitudes toward art appreciation are, to a certain extent, negative because of our pioneer heritage of utilitarianism, nevertheless we are slowly coming to realize that art can and should be appreciated by all socio-economic levels.

Our society draws upon a mixture of many cultures from many different parts of the world. Many of these countries have a cultural heritage thousands of years old and their attitudes toward the appreciation of art can be expected to be different and perhaps more positive than our own. Through the artistic expression of other cultures as well as our own we can perhaps learn to understand and appreciate the viewpoints of others, as well as gain some measure of self-understanding.

Art appreciation has long been a subject for reflection and subjective analysis. It has only recently become a subject for objective research in the areas of art attitudes, appreciation, and aesthetic preferences.

Art educators are giving increasing attention to those areas which are relevant to the development of critical judgment. Studies show that the art teacher is a tastemaker in the classroom and that his manner, technique and attitude toward art play important roles in influencing and developing similar student attitudes.

CHAPTER III

THE RESEARCH DESIGN AND PROCEDURES

This chapter deals with the selection of the population, description of the instruments employed in the study, and the procedures undertaken for the collection and treatment of the data.

Data were obtained from Alberta secondary schools during the 1967-68 school year.

Procedures were conducted in two phases. Part I resulted in the final selection of a student body which was later tested by means of the Eisner Art Information and Attitude Inventories. Part II was concerned with the completion of these two Inventories.

PART I OF THE STUDY

The Population

The population comprised all those teachers offering art at the Grade IX level in Alberta secondary schools for the academic year 1967-68. Names of the teachers were obtained from the Department of Education of the Province of Alberta. A total of 97 teachers was represented in the first part of the study.

The Instrument

A Questionnaire to Teachers was designed to determine the approximate class time each teacher devoted to art appreciation and art production at the Grade IX level for the 1967-68 school year in Alberta. In addition, teachers were asked to state, in order of personal

preference, those art activities which, they felt, made the greatest contribution to the cultivation of critical-appreciative attitudes on the part of their students.

A copy of the Questionnaire is provided in Appendix A.

Distribution and Return of Questionnaires. The questionnaires were mailed to the principals of the participating schools during the latter part of April. The principals were asked to assume responsibility for (1) handing out the questionnaires to the Grade IX art teachers, and (2) returning the completed questionnaires. Stamped, addressed envelopes were enclosed to facilitate return of the questionnaires.

Seventy-four of the questionnaires, or 76 per cent of the total sent out, were returned by the teachers involved in this part of the study. Six questionnaires were returned incomplete, while six other teachers returned the questionnaires stating they did not teach art at the Grade IX level during 1967-68. Table I shows the total number of questionnaires mailed and returned.

TABLE I

DISTRIBUTION OF QUESTIONNAIRES AND NUMBER OF RETURNS,
INCLUDING RURAL, URBAN AND COUNTY SCHOOLS

	Number of Questionnaires Mailed	Number of Questionnaires Returned		Number of Questionnaires Not Returned	
		No.	%	No.	%
Urban	82	65	79	17	21
Rural and County	15	9	60	6	40
Total	97	74		23	

Treatment of the Data

The responses to Question 5 of the completed questionnaires (Appendix A, page 99), which indicated the amount of class time devoted to art appreciation and art production activities, were transferred onto IBM cards. For this study, five art-related areas--art history, analysis of art works, visits to museums and galleries, the elements and principles of design, and environmental studies--were classed as falling within the domain of art appreciation or knowledge about art. The class hours devoted to art appreciation and art production activities were then converted to percentages.

From this information, three categories of art programs were set up for comparative purposes. They were:

Art Program 1: An art production-oriented program wherein up to 20 per cent class time dealt with art appreciation;

Art Program 2: An art production-oriented program wherein 20 to 32 per cent class time was devoted to art appreciation;

Art Program 3: A more appreciation-oriented art program wherein over 33 per cent class time was devoted to art appreciation.

Each completed Teacher Questionnaire was assigned to one of the three art programs described above.

PART II OF THE STUDY

Students participating in the second part of this study were enrolled in Grade IX art classes taught by thirty-four teachers whose programs were representative of Art Programs 1, 2 and 3. The

selection of these thirty-four teachers was based on the following criteria:

1. The art programs appeared to stress either art appreciation or art production, based on the information drawn from Questions 5 and 7 of the Teacher Questionnaire (Appendix A, page 99).
2. Each art program included at least ten teachers and ten classes.
3. An adequate student population was available.
4. The population represented a cross-section of as many geographical areas as possible in Alberta.
5. Teachers showed willingness to participate in the second phase of the study.

The Eisner Art Attitude and Information Inventories were later administered to a total of 798 students, as shown in Table II.

TABLE II

STUDENT POPULATION BY SEX FOR ART PROGRAMS 1, 2 AND 3,
TOTAL STUDENTS: 798 TOTAL TEACHERS: 34

	Group 1 Art Program 1 Zero to 20% art appreciation 11 classes	Group 2 Art Program 2 20 to 32% art appreciation 11 classes	Group 3 Art Program 3 33% and over art appreciation 12 classes	Total
Male	138	120	165	423
Female	109	121	145	375
Total	247	241	310	798

The Instruments

The Eisner Art Information Inventory, a sixty-item, multiple

choice instrument, was designed to test an individual's knowledge about art. It consists of four sections, each containing fifteen questions. Subtest 1 concerns itself with knowledge about art terms; Subtest 2 deals with art media and art processes; Subtest 3 tests knowledge about artists and their work; Subtest 4 focusses on art history.

Responses to the Inventory are written, in pencil, on an IBM answer sheet which can be scanned and scored optically.

Students were instructed to choose one correct answer out of five alternatives for each item on the Inventory.

A copy of the Information Inventory is included in Appendix A.

On completion of the Information Inventory, students were asked to respond to the Eisner Art Attitude Inventory.

The Eisner Art Attitude Inventory, like the Information instrument, is made up of four subtests, fifteen questions each, making a total of sixty multiple-choice items. It was designed to measure feelings about art, artists and art activities. Subtest 1 discloses personal feelings about art activities; Subtest 2 is concerned with participation in art activities outside of class time; Subtest 3 measures feelings about art ability and art classes; Subtest 4 is concerned with an individual's feelings and attitudes about artists and art works.

There are no correct answers on the Attitude Inventory. Students' responses indicate whether they strongly agree, agree, are uncertain, disagree or strongly disagree with a statement. Only one choice out of five alternatives is allowed for each of the sixty items on the Inventory. This attitude scale consists of five steps ranging from "very negative" to a "very positive" attitude with a central "neutral" zone.

A copy of the Attitude Inventory is included in Appendix A.

Reliability and Validity of Instruments. When Eisner developed these two inventories he was concerned not only with creating two new instruments to measure art information and art attitudes but with the "construction of two instruments that would be both reliable and valid".¹

According to Eisner,² odd-even test reliability was computed for the Art Information Inventory (+.90) and the Kuder-Richardson 20 formula (item homogeneity) for the Art Attitude Inventory (+.93).

The Information and Attitude Inventories were originally administered to 1488 students in eighteen American educational institutions in six states, from the Grade IX level to the senior year in college.³ Eisner's findings indicate that students at the Grade IX level, on the average, give correct answers to approximately 50 per cent of the sixty-item Information Inventory.⁴

Distribution and Return of the Instruments. A sufficient number of Eisner Art Information and Art Attitude Inventories, together with IBM answer sheets, was mailed to the principals of the selected schools. The principals handed the test materials to the art teachers chosen to

¹Elliot W. Eisner, "The Development of Information and Attitude Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), pp. 43-45.

²Elliot W. Eisner, "Curriculum Ideas in a Time of Crisis", Art Education (Washington: National Art Education Association, October, 1965), pp. 10-12.

³Elliot W. Eisner, Studies in Art Education, Fall, 1966, p. 44.

⁴Ibid., p. 45.

participate in this part of the study, and were responsible for the return of the inventories and completed answer sheets.

The majority of the completed answer sheets and the two Inventories were picked up from the schools by the researcher. The remainder was returned by mail.

Method of Scoring Instruments. The IBM 1230 Optical Mark Scoring Reader, together with the IBM 534 Card Punch, were utilized to score and transfer simultaneously onto IBM cards the responses to the Eisner Art Information and Attitude Inventories. One card was punched for each answer sheet containing the responses to the two inventories, making a total of 798 cards.

The information on these cards was then decoded by using the IBM 360 computer. During this process two cards were punched, by the computer, for each student--one card containing his responses to the Information Inventory and one card containing his Attitude responses.

Each correct answer on the Information Inventory received one mark; an incorrect response received zero. It was possible for a student to score 15 points for each subtest for a total of 60 correct responses on the Information Inventory.

The Attitude Inventory was scored as follows:

- (a) "very positive" received five points,
- (b) "positive" received four points,
- (c) "middle of the road" or "neutral" received three points,
- (d) "negative" received two points, and
- (e) "very negative" received one point.

A total score of 300 could be achieved by an extremely positive individual and a score of 60 by one who was extremely negative.

Treatment of the Data

Mean scores and standard deviations were computed for the three groups of students as well as for the male-female subgroups within the three groups for the Eisner Art Information and the Eisner Art Attitude Inventories.

Due to typographical and reproduction errors, two questions, one in Subtest 1 and the other in Subtest 3 of the Art Information Inventory, were considered spoiled. The means obtained by the three groups of students on the Art Information Inventory were therefore calculated on fifty-eight items. In order to compare the art information means with those of Eisner's study, it was necessary to express each of the means obtained in this study, and those from Eisner's study, as a percentage of the total questions on the Inventory. These percentages will be placed, in parentheses, beside each of the means for the Art Information Inventory.

In addition, percentage frequency distributions were set up in order to show the test performance of the students on the two Inventories.

Cumulative percentage ogives were drawn to show the number of individuals who scored above and below the first, second (median), and third quartiles, and the extent to which the distributions overlapped one another at each of these three points.

The relationships between information and attitude scores, information and information scores (whole and subtest), and attitude and attitude scores (whole and subtest), were obtained by the Spearman Rank Method of Correlation. The method is as follows:

1. The ranks of each case on the two respective traits are listed,
2. The differences between the above ranks are noted,

3. The differences are squared,
4. The squares are summated, and
5. Formula $\rho = 1 - \frac{6\sum d^2}{N(N^2-1)}$ is used to find the Rank Correlation Coefficient. $\sum D^2$ = sum of the squared differences between ranks,
N = number of pairs of measurements.

CHAPTER IV

FINDINGS: PART I OF THE STUDY

Chapter IV presents the data obtained to provide answers to two of the seven questions posed in Chapter I.

Question 1: What was the general nature of the Grade IX art programs in specific Alberta schools for the 1967-68 school year, with particular reference to art appreciation?

Because of the detailed nature of the information submitted in reply to Question 1, it was decided to include the data in an appendix. (Appendix B, Table III, page 113) The data indicate that the Grade IX art program for the 1967-68 school year in the sixty-two Alberta schools participating in this study was a production-oriented one. The completed questionnaires show that the greatest percentage of art class time was devoted to drawing and painting in all of the sixty-two participating schools. Twelve schools reported over 50 per cent art class time devoted to drawing and painting, while 31 schools reported that 25 to 50 per cent of their regular art class time was set aside for drawing and painting.

Forty-four schools taught a small amount of graphics--an average of 8.0 per cent for these forty-four schools--and forty-two schools taught three dimensional art work such as sculpture. Approximately half the schools did not teach ceramics and an equal number of schools did not include building and construction in their art programs. The reasons given for non-inclusion of these art activities were lack of proper facilities, art materials and time.

Stitchery and fabrics in many cases were felt to be more closely allied to household economics and were therefore not included in those art programs.

Theatre arts appeared in thirteen art programs only, while photography appeared only once. Some cartooning was included in approximately two-thirds of the sixty-two schools.

Art appreciation, as defined in this study to include art history, analysis of art works, visits to galleries and museums, design elements and principles, architecture and interior design, played a much smaller role in the sixty-two art programs than did art production activities.

Art history appeared in forty-eight out of sixty-two schools. Interior design and architecture occurred in approximately one-third of the art programs. As to museum and gallery visits, it appears that they were few and far between, occurring in only five out of sixty-two possible cases. Many reasons were given for this, among them being transportation problems, administration and discipline problems, and no galleries or museums within reasonable travelling distance of the schools.

The elements and principles of design took up a considerable proportion of class time, ranging anywhere from none at all to 40 per cent for the school year. Thirty schools were in the 10 to 25 per cent range for design study, twenty-four gave under 10 per cent of their art time to it, and the eight remaining schools listed 25 to 40 per cent class time devoted to design elements and principles.

Question 2 (a): Which art activities, according to the Grade IX art teachers, lent themselves most readily to the inclusion of instruction in art appreciation?

When the responses to Question 7 of the Questionnaire, "Please list, in order of priority, the art activities that you consider most appropriate to the development of the capacity for appreciating art works", were counted, it was found that four art activities, namely the study of art history, visits to museums and galleries, analysis of art works, and the elements and principles of design made the greatest contribution to the appreciation of art works, according to the sixty-two participating art teachers. It was not possible to ascertain any order of priority for these art activities from the responses received.

Question 2 (b): Which art activities made the greatest contribution toward the development of a good art program at the Grade IX level?

A count of the responses to Question 6 of the Questionnaire, "Please state, in order of priority, the art activities that you consider most appropriate to a good Grade IX art program in a school", showed, without doubt, that drawing and painting occupied first place in a good Grade IX art program. Fifty-eight out of sixty-two teachers ranked drawing and painting as first in order of priority; twenty-eight out of sixty-two teachers listed design elements and principles as second, and twelve teachers gave each of sculpture and graphics as their third choice. Seven teachers gave each of ceramics, and building and construction, as their third choices. Some of the remaining art activities listed on the questionnaire were mentioned only incidentally and many not at all. Art history occurred only twice, once as a second choice and once as a third choice. Analysis of art works appeared only five times as a third choice. Environmental studies appeared twice as first choice in the building of a sound Grade IX art program.

From an inspection of the choices made, it would appear that the consensus of opinion among the participating teachers is that a good art program at the Grade IX level is a production-oriented one.

CHAPTER V

FINDINGS: PART II OF THE STUDY: ART INFORMATION

Chapter V deals with Questions 3 and 4 outlined in Chapter I. These questions are concerned with student knowledge about art at the Grade IX level as measured by the Eisner Art Information Inventory, a sixty-item, multiple-choice instrument, consisting of four sections of fifteen questions each.

Question 3: Did the art programs offered have any bearing on the distribution of art information scores obtained by the three groups of students on the Eisner Art Information Inventory?

Performance of Groups 1, 2 and 3, Whole Test

The data in Tables III and IV, pages 52-53, of "The Development of Information and Attitude Toward Art at the Secondary and College Levels",¹ show that Grade IX students in that survey received a mean score of 30.39 on the sixty-item Information Inventory.

Table IV indicates that in the present study Groups 1, 2 and 3 received mean scores of 24.29 (42%), 24.28 (42%), and 25.76 (44%) respectively on the Art Information Inventory, all well below the mean of 30.39 (50%) for Eisner's group at the Grade IX level.

The mean score for Group 1 was .01 greater than that of Group 2, while Group 3 exceeded Groups 2 and 1 by 1.48 and 1.47 respectively, as shown in Table V.

¹Elliot W. Eisner, "The Development of Information and Attitude Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), pp. 52-53.

TABLE IV

TEST PERFORMANCE OF GROUPS 1, 2 AND 3, MEAN SCORES
FOR WHOLE TEST AND FOUR SUBTESTS, ART INFORMATION

	Mean	S.D.	Median
<u>Group 1</u>			
Total 60 items	24.29	7.84	23
Subtest 1	8.35	2.95	
2	7.46	3.16	
3	4.76	2.03	
4	3.78	2.12	
<u>Group 2</u>			
Total 60 items	24.28	8.41	22
Subtest 1	8.03	2.71	
2	7.49	3.52	
3	4.93	2.29	
4	3.88	2.30	
<u>Group 3</u>			
Total 60 items	25.76	7.60	24
Subtest 1	8.70	2.70	
2	7.93	3.03	
3	5.08	2.14	
4	4.11	2.37	

TABLE V

MEANS AND DIFFERENCES BETWEEN MEANS, GROUPS 1, 2, 3,
ART INFORMATION

	Means			Mean Differences		
	Group 1	Group 2	Group 3	$M_2 - M_1$	$M_3 - M_2$	$M_3 - M_1$
60 items	24.29	24.28	25.76	.01	1.48	1.47
Subtest 1	8.35	8.03	8.70	.32	.67	.35
2	7.46	7.49	7.93	.03	.44	.47
3	4.76	4.93	5.08	.17	.15	.32
4	3.78	3.88	4.11	.11	.22	.33

The median, calculated for each of Groups 1, 2 and 3, showed the fifty per cent point of each distribution of scores. Table IV shows the medians to be 23, 22 and 24 for Groups 1, 2 and 3 respectively. The median in each case was slightly smaller than the mean, indicating that all three distributions exhibited a slight positive skewness.

The data in Table VI show, and Figure 1 illustrates graphically, the extent of similarities and differences among the three distributions. The greatest differences occurred as follows:

1. Between Groups 1 and 2, Interval 16 to 18: 13.4 per cent of Group 1 and 17.8 per cent of Group 2 scored in this interval.

2. Between Groups 2 and 3, Intervals 10 to 12, 16 to 18, and 22 to 24: 5.8 per cent, 17.8 per cent and 14.1 per cent of Group 2 received scores in each of the above three intervals respectively, while 1.9 per cent, 8.1 per cent and 20 per cent of Group 3 could be located in the same three intervals, respectively.

3. Between Groups 1 and 3, Intervals 10 to 12, 16 to 18, and 22 to 24: 7.6 per cent of Group 1 and 1.9 per cent of Group 3 could be located within interval 10 to 12. Interval 16 to 18 shows that 13.4 per cent of Group 1 scores and 8.1 per cent of Group 3 scores could be located there, while 12.9 per cent of Group 1 and 20 per cent of Group 3 could be found within interval 22 to 24.

According to the figures in Table VII, which could also be obtained from Figure 2, Appendix C, page 116, 25 per cent of Groups 1, 2 and 3 scored below 18, 17, and 20 respectively, while 50 per cent of the three groups scored below 23, 22 and 24 respectively.

Seventy-five per cent of Group 1 scored below 29 while the same percentage of students in Groups 2 and 3 scored below 29 and 30 respectively.

TABLE VI

PERCENTAGE FREQUENCY TABLE, SCORES FOR GROUPS 1, 2, 3, ART INFORMATION

Intervals	Group 1		Group 2		Group 3	
	No.	%	No.	%	No.	%
52-54	0	0.0	0	0.0	0	0.0
49-51	0	0.0	2	.8	0	0.0
46-48	0	0.0	1	.5	1	.3
43-45	4	1.6	3	1.2	6	1.9
40-42	4	1.6	5	2.1	7	2.3
37-39	7	2.9	9	3.8	11	3.6
34-36	12	4.9	12	4.9	16	5.2
31-33	17	6.9	12	4.9	22	7.1
28-30	32	12.9	27	11.2	42	13.5
25-27	30	12.1	27	11.2	46	14.8
22-24	32	12.9	34	14.1	62	20.0
19-21	35	14.2	25	10.4	37	11.9
16-18	33	13.4	43	17.8	25	8.1
13-15	21	8.6	25	10.4	25	8.1
10-12	19	7.6	14	5.8	6	1.9
7- 9	1	.4	2	.9	3	1.0
4- 6	0	0.0	0	0.0	0	0.0
1- 3	0	0.0	0	0.0	1	0.3
	247	100.0	241	100.0	310	100.0

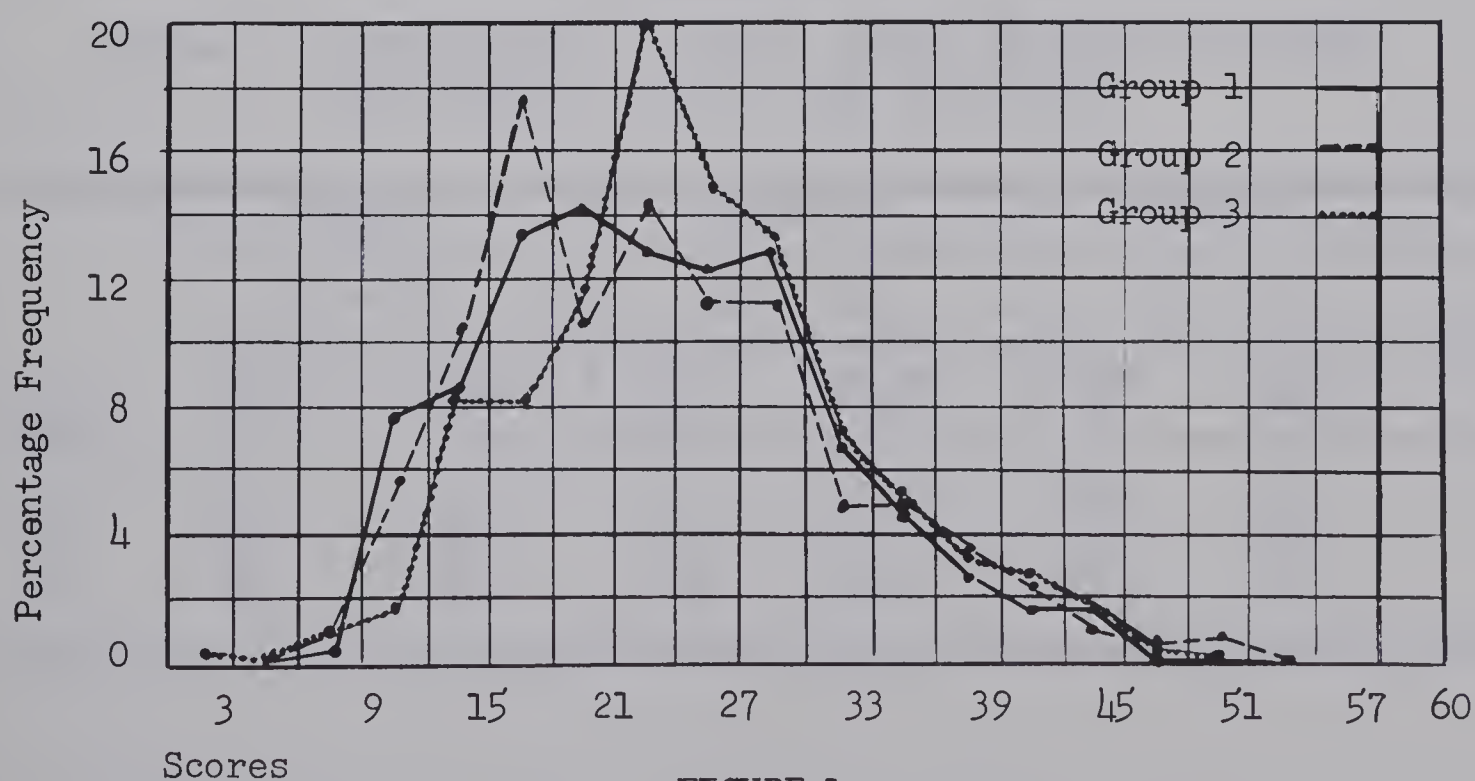


FIGURE 1

TEST PERFORMANCE OF GROUPS 1, 2 AND 3, ART INFORMATION

TABLE VII

FIRST, SECOND AND THIRD QUARTILES FOR GROUPS 1, 2, 3,
(FIGURES TO THE NEAREST WHOLE NUMBER), ART INFORMATION

Group	Q ₁	Q ₂ (median)	Q ₃	Interquartile Range Middle 50 per cent
1	18	23	29	18-29
2	17	22	29	17-29
3	20	24	30	20-30

The middle 50 per cent of the students (interquartile range) scored between 18 and 29 for Group 1, from 17 to 29 for Group 2, and from 20 to 30 for Group 3.

By extending the vertical lines through the first, second and third quartiles on the ogives in Figure 2, Appendix C, page 116, overlap from one distribution to another was calculated. For the purpose of this study, overlap was computed from Group 3 to Groups 1 and 2. Table VIII gives the results of these computations.

TABLE VIII

OVERLAP OF DISTRIBUTIONS AT FIRST, SECOND AND THIRD QUARTILES
FOR GROUPS 1, 2 AND 3, ART INFORMATION

Group	Group 3		Group 3		Group 3	
	Q ₁ = 20		Q ₂ = 24		Q ₃ = 30	
	above %	below %	above %	below %	above %	below %
1	64	36	43	57	22	78
2	61	39	41	59	22	78
3	75	25	50	50	25	75

According to the above Table, the greatest differences between the three groups appeared in the vicinity of the first quartile of Group 3. Approximately 36 per cent of Group 1 and 39 per cent of Group 2 were below Group 3's first quartile of 20; 64 per cent of Group 1 and 61 per cent of Group 2 exceeded 20.

Approximately 57 per cent and 59 per cent of Groups 1 and 2 respectively scored below Group 3's median of 24; 43 per cent of Group 1 and 41 per cent of Group 2 scored above 24.

Seventy-eight per cent of Group 1 and 78 per cent of Group 2 scored below 30, the Q_3 for Group 3; only 22 per cent of Groups 1 and 2 exceeded 30.

While 30 is the third quartile for Group 3, it is also Eisner's mean for Grade IX performance on the Information Inventory.² Three-quarters of the students in Groups 1, 2 and 3 were below the established mean of 30.39.

The highest and lowest scores obtained by individuals within Group 1 were 45 and 9, within Group 2, 51 and 7, and within Group 3, 46 and 2.

Performance of Groups 1, 2 and 3, by Subtest.

Eisner's study showed that for Subtests 1 to 4, the mean scores obtained by Grade IX students were 9.36, 9.45, 5.98 and 5.58 respectively,³ or 62 per cent, 63 per cent, 40 per cent and 37 per cent of the questions were answered correctly in Subtests 1 to 4 respectively.

The data in Table IV, page 43, indicate that each of the subtest means for Groups 1, 2 and 3 was below those listed in the above paragraph.

²Ibid., p. 45.

³Ibid., p. 53.

Group 1 means were 8.35 (59%), 7.46 (50%), 4.76 (34%), and 3.78 (25%) for Subtests 1 to 4. Group 2 means were similar--8.03 (57%), 7.49 (50%), 4.93 (35%), and 3.88 (26%) for Subtests 1 to 4 respectively, while Group 3 means were 8.70 (62%), 7.93 (53%), 5.08 (36%), and 4.11 (27%) for Subtests 1 to 4 respectively.

That our Grade IX art program is a production-oriented one is shown by the results of the four subtests for each of the three groups. Subtest 1, which deals with art terms, received the highest mean scores; Subtest 2, dealing with art media and processes, came second; Subtest 3, concerning artists and their work, showed mean scores which were lower than those of Subtests 1 and 2. Subtest 4, which tests basic knowledge about art history, showed mean scores for the three groups that were even lower than those received by the same three groups in the subtests dealing with art terms, art media, and art processes.

From these figures, it seems reasonable to say that Groups 1, 2 and 3 showed a tendency to perform in a similar manner on each of the four subtests. Had a greater amount of art appreciation, as defined in this study, been taught to the students in Groups 2 and 3 than to Group 1, then the results of Subtests 3 and 4 should have shown a sizeable increase in mean scores for Group 2, and an even more marked increase for Group 3. Although a very slight increase between the means of Groups 1, 2 and 3 did occur, the mean difference in each case did not exceed one.

Question 4: Did any differences in the distribution of art information scores occur between the males and females within and between each of the three groups of students?

Performance of Male-female Subgroups, Within Groups, Whole Test

Further study was made of the three groups to try to determine whether there was any difference in performance between males and females. Groups 1, 2 and 3 were subdivided, by sex, to make a total of six subgroups. For the purpose of this study, the six subgroups were labelled as follows:

Group 1: females 1F
males 1M,

Group 2: females 2F
males 2M, and

Group 3: females 3F
males 3M.

Comparisons were then made between the two subgroups within each group: 1F and 1M, 2F and 2M, and 3F and 3M, and between the three pairs of subgroups.

The findings outlined in "The Development of Information and Attitude Toward Art at the Secondary and College Level" had indicated that Grade IX males and females received mean scores of 28.06 and 31.50 respectively on the Information Inventory.⁴ Eisner stated that "girls received higher scores than boys not only for the population at large but at each grade level".⁵ This finding led Eisner to suggest that our culture tends to regard artistic endeavor and interests as being primarily feminine activities.

The figures in Table IX indicate that Group 1, 2 and 3 males and females received mean scores as follows: Group 1 males 23.18 (40%), Group 1 females 25.69 (44%), Group 2 males 22.87 (40%), Group 2 females

⁴Ibid., p. 52.

⁵Ibid., p. 48.

25.65 (44%), Group 3 males 24.32 (42%), and Group 3 females 27.40 (47%), all below Eisner's mean scores of 28.06 (47%) for the males and 31.50 (53%) for the females.⁶

TABLE IX

MEANS AND DIFFERENCES BETWEEN MEANS BETWEEN MALE AND
FEMALE SUBGROUPS, ART INFORMATION

	Group 1		Difference between Means
	Female 1F	Male 1M	
Whole test	25.69	23.18	2.51
Subtest 1	8.93	7.89	1.04
2	8.04	7.01	1.03
3	4.77	4.76	.01
4	4.01	3.59	.42
	Group 2		Difference between Means
	Female 2F	Male 2M	
Whole test	25.65	22.87	2.78
Subtest 1	8.40	7.65	.75
2	8.17	6.82	1.35
3	5.07	4.78	.29
4	4.06	3.71	.35
	Group 3		Difference between Means
	Female 3F	Male 3M	
Whole test	27.40	24.32	3.08
Subtest 1	9.47	8.03	1.44
2	8.47	7.45	1.02
3	5.11	5.06	.05
4	4.42	3.83	.59

Tables X and XI and Figures 3 to 5 were designed to show the test performance of the three pairs of subgroups. It is evident that the three groups of males scored below the three groups of females. The

⁶Ibid., p. 52.

distributions of all six groups were positively skewed.

Although the means differed for the sexes, the range of scores was about the same for both sexes. That is, some boys got very high scores and some girls got very low scores.

Groups 1F and 1M. Only 1 per cent of the males and no females were found in the 1 to 9 range. Twenty per cent of the girls and 37 per cent of the boys scored between 10 and 18. In the 19 to 30 range, approximately 61 per cent of the girls and 46 per cent of the boys can be located. Nineteen per cent of the girls and 17 per cent of the boys scored between 31 and 60.

Figure 3 illustrates that the greatest difference between Groups 1F and 1M occurred in the 10 to 12 and 16 to 18 intervals. Four per cent and 11 per cent of Groups 1F and 1M respectively, scored between 10 and 12, while 9 per cent of 1F and 17 per cent of 1M scored between 16 and 18.

According to Table XII, page 55, and Figure 6, Appendix C, page 117, 61 per cent of Group 1 males scored below 1F's median of 24.1.

The middle 50 per cent of the males and females scored between 16.4 and 28.4, and 19.4 and 29.4 respectively. (Table XIII, page 55)

Groups 2F and 2M. Approximately 2 per cent of the males and no females scored below 9. Twenty-eight per cent of the females and 40 per cent of the males scored in the 10 to 18 range. Fifty per cent of the females and 43 per cent of the males were to be found with scores between 19 and 30. Twenty-one per cent of the females and 15 per cent of the males received scores between 31 and 60.

The greatest difference between these two groups occurred in the

TABLE X

PERCENTAGE FREQUENCY TABLE, SCORES FOR THREE MALE SUBGROUPS,
ART INFORMATION, WHOLE TEST

Intervals	Group 1M		Group 2M		Group 3M	
	Number	%	Number	%	Number	%
46-48	0	0.0	1	.8	1	.6
43-45	2	1.5	0	0.0	2	1.2
40-42	1	.7	3	2.5	3	1.8
37-39	2	1.5	3	2.5	4	2.4
34-36	8	5.8	7	5.9	7	4.3
31-33	10	7.2	4	3.3	9	5.5
28-30	15	10.9	10	8.3	14	8.5
25-27	16	11.6	16	13.3	24	14.6
22-24	14	10.1	11	9.2	38	23.0
19-21	18	13.0	15	12.5	22	13.3
16-18	23	16.7	22	18.3	17	10.3
13-15	13	9.4	17	14.2	17	10.3
10-12	15	10.9	9	7.5	4	2.4
7- 9	1	.7	2	1.7	3	1.8
4- 6	0	0.0	0	0.0	0	0.0
1- 3	0	0.0	0	0.0	0	0.0
	138	100.0	120	100.0	165	100.0

TABLE XI

PERCENTAGE FREQUENCY TABLE, SCORES FOR THREE FEMALE SUBGROUPS,
ART INFORMATION, WHOLE TEST

Intervals	Group 1F		Group 2F		Group 3F	
	Number	%	Number	%	Number	%
49-51	0	0.0	2	1.7	0	0.0
46-48	0	0.0	0	0.0	0	0.0
43-45	2	1.8	3	2.5	4	2.8
40-42	3	2.8	2	1.7	4	2.8
37-39	5	4.6	6	4.9	7	4.8
34-36	4	3.7	5	4.1	9	6.2
31-33	7	6.4	8	6.6	13	8.9
28-30	17	15.6	17	14.0	28	19.3
25-27	14	12.8	11	9.1	22	15.2
22-24	18	16.5	23	19.0	24	16.6
19-21	17	15.6	10	8.3	15	10.3
16-18	10	9.2	21	17.4	8	5.5
13-15	8	7.3	8	6.6	8	5.5
10-12	4	3.7	5	4.1	2	1.4
7- 9	0	0.0	0	0.0	0	0.0
4- 6	0	0.0	0	0.0	0	0.0
1- 3	0	0.0	0	0.0	1	0.7
	109	100.0	121	100.0	145	100.0

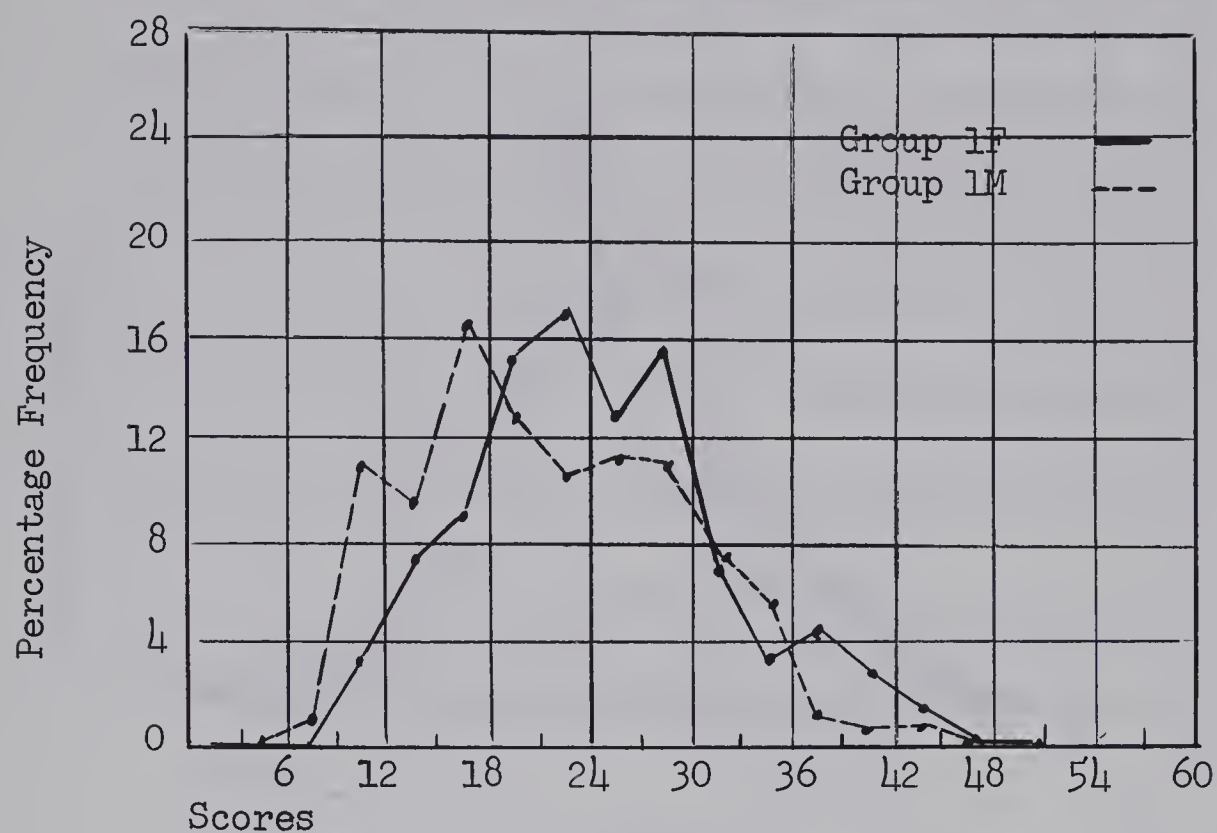


FIGURE 3

TEST PERFORMANCE OF GROUPS 1F and 1M,
ART INFORMATION

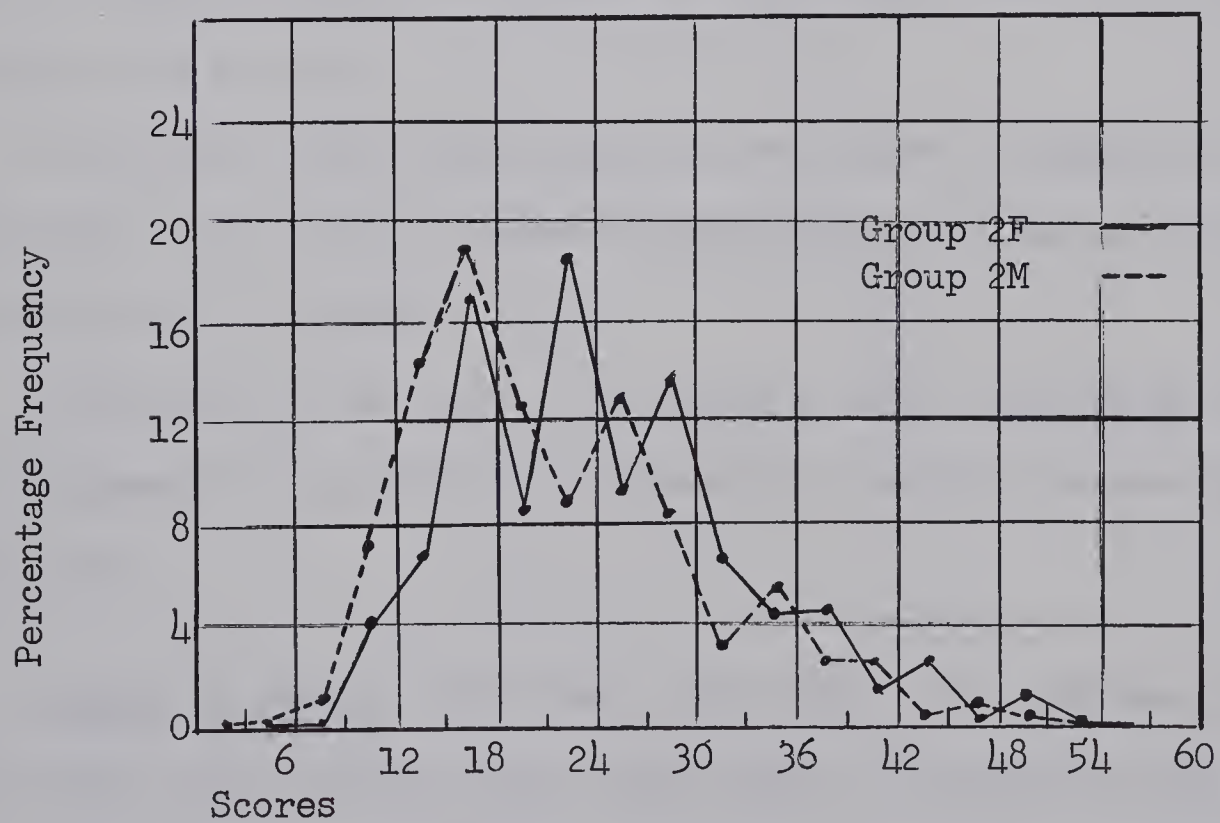


FIGURE 4

TEST PERFORMANCE OF GROUPS 2F and 2M,
ART INFORMATION

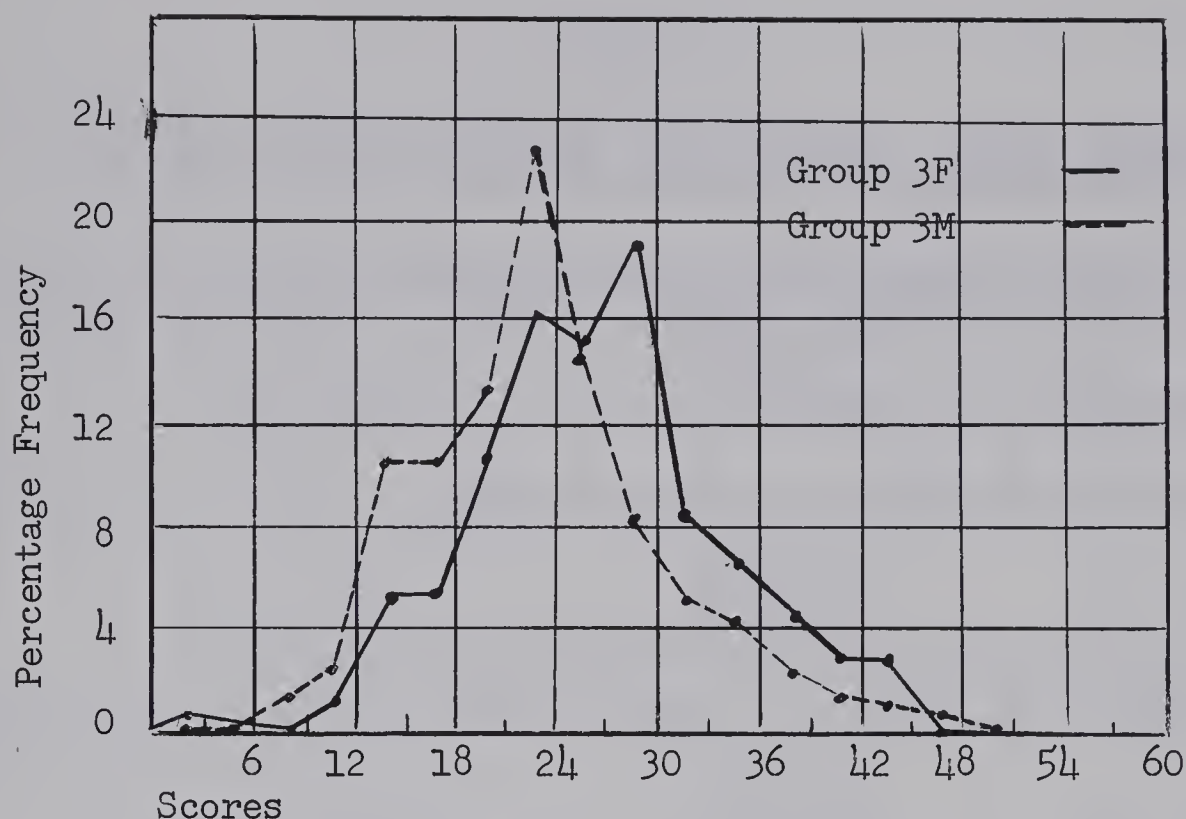


FIGURE 5

TEST PERFORMANCE OF GROUPS 3F and 3M,
ART INFORMATION

22 to 24 interval where 19 per cent of the females and 9.1 per cent of the males were located.

According to Table XII, page 55, and Figure 7, Appendix C, page 118, 59 per cent of the males in Group 2 scored below the median of 23.7 for the females in that group.

The middle 50 per cent of the Group 2 males and females received scores between 16.4 and 27.8 and between 18.0 and 29.7 respectively. (Table XIII).

Groups 3F and 3M. Less than 1 per cent of the females obtained scores below nine, and less than 2 per cent of 3M scored in the 1 to 9 range. Thirteen per cent of the females and 22 per cent of the males scored between 10 and 18. Sixty-one per cent of the females and 59 per cent of the males received scores between 19 and 30. Twenty-six per cent of the females and 16 per cent of the males scored between 31 and 60.

TABLE XII

PERCENTAGE OF MALES ABOVE AND BELOW FEMALES' FIRST, SECOND AND THIRD QUANTILES, WITHIN SUBGROUPS, ART INFORMATION

Percentage	Above	Below	Above	Below	Above	Below
Group 1F						
	$Q_1 = 19.0$		$Q_2 = 24.1$		$Q_3 = 29.4$	
Group 1M	60	40	39	61	22	78
Group 2F						
	$Q_1 = 18.0$		$Q_2 = 23.7$		$Q_3 = 29.7$	
Group 2M	58	42	41	59	18	82
Group 3F						
	$Q_1 = 22.4$		$Q_2 = 26.4$		$Q_3 = 30.5$	
Group 3M	60	40	32	68	16	84

TABLE XIII

FIRST, SECOND, AND THIRD QUANTILES FOR SIX SUBGROUPS, ART INFORMATION

Group No.	First Quartile	Second Quartile (Median)	Third Quartile
1F Females	19.4	24.1	29.4
1M Males	16.4	21.3	28.4
2F Females	18.0	23.7	29.7
2M Males	16.4	20.5	27.8
3F Females	22.4	26.4	30.5
3M Males	18.5	23.0	28.3

The interval 22 to 24 was the area of greatest difference between these two groups where the number of male scores exceeded that of the females. According to Tables X and XI, 23 per cent of the males and only 16.6 per cent of the females scored between 22 and 24.

Table XII, and Figure 8, Appendix C, page 119, show that 68 per cent of 3M scored below 3F's median of 26.4.

The middle 50 per cent of the males and females scored between 18.5 and 28.3 and between 22.4 and 30.5 respectively. (Table XIII, page 55)

Performance of Male-female Subgroups, Between Groups, Whole Test

From the material presented above, the following conclusions were drawn:

1. Within and between each pair of subgroups, the males scored below the three females' groups.
2. The median for each subgroup was lower than its mean, indicating that the major portion of the three pairs of scores fell below the mean of each distribution.
3. While the girls scored higher than did the boys, both sexes showed a tendency to perform in a similar manner on the Eisner Art Information Inventory, as shown by the overlapping frequency polygons in Figures 3 to 5.

There was a similarity of test performance by the three groups of females as shown in Figure 9, Appendix C, page 120, as well as by the three groups of males, Figure 10, Appendix C, page 121.

4. The major differences between the three pairs of subgroups occurred within the score intervals (Tables X and XI, page 52). For example, each of Group 1, 2 and 3 males received more scores below 18 than did each of Group 1, 2 and 3 females. Approximately 38 per cent of Group 1 males, 42 per cent of Group 2 males and 25 per cent of Group 3 males scored below 18, while 20 per cent, 28 per cent and 12 per cent of Group 1, 2 and 3 females, respectively, received scores below 18.

5. Few "very high" or "very low" scores were recorded within the three pairs of subgroups.

Performance of Male-female Subgroups, by Subtest

The data in Table XIV show that the girls scored consistently higher than the boys on all but Subtest 3, which deals with artists and their work. Knowledge about artists and their work appears to be evenly distributed between the two sexes in each of the three groups. Both boys and girls in Groups 1, 2 and 3 received their highest scores in the sections dealing with art terms, art media and processes. Since a greater amount of art appreciation or knowledge about art had been taught to Groups 2 and 3 than to Group 1, then it seems reasonable to assume that Group 2, and to an even greater extent Group 3, should have shown a sizeable increase in mean scores for the whole Information Inventory, and Subtests 3 and 4 as well. The figures showed that this situation did not occur.

TABLE XIV

MEAN SCORES FOR GROUPS 1, 2 and 3, BY SEX,
WHOLE TEST AND BY SUBTEST, ART INFORMATION

	Group No.	Males		Females		Total Group	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Whole test	1	23.18	7.98	25.69	7.49	24.29	7.84
	2	22.89	8.15	25.65	8.49	24.28	8.41
	3	24.32	7.35	27.40	7.59	25.76	7.60
Subtest 1	1	7.89	3.03	8.93	2.77	8.35	2.95
	2	7.65	2.84	8.40	2.54	8.03	2.71
	3	8.03	2.64	9.47	2.59	8.70	2.70
Subtest 2	1	7.01	3.26	8.04	2.94	7.46	3.16
	2	6.82	3.45	8.17	3.48	7.49	3.52
	3	7.46	3.02	8.47	2.95	7.93	3.03
Subtest 3	1	4.76	2.05	4.77	2.02	4.76	2.03
	2	4.78	2.25	5.07	2.35	4.93	2.29
	3	5.06	2.05	5.11	2.24	5.08	2.14
Subtest 4	1	3.59	2.02	4.01	2.23	3.77	2.12
	2	3.71	2.08	4.06	2.50	3.88	2.30
	3	3.83	2.19	4.42	2.53	4.11	2.37

CHAPTER VI

FINDINGS: PART II OF THE STUDY: ART ATTITUDES

Student attitudes toward art at the Grade IX level were measured by the Eisner Art Attitude Inventory, a sixty-item, multiple-choice instrument, consisting of four sections of fifteen questions each.

The norm for this Inventory is a score of 180. Scores above 180 are considered to be on the positive side of the scale while those below 180 indicate a negative attitude toward art. According to Eisner, a "thorough middle-of-the-roader would receive a score of 180".¹

This chapter deals with Questions 5 and 6 posed in Chapter 1 which are concerned with student attitudes toward art.

Question 5: Did the art programs offered have any bearing on the distribution of art attitude scores obtained by the three groups of students on the Eisner Art Attitude Inventory?

Performance of Groups 1, 2 and 3, Whole Test

The data in Table XV present the performance of the three groups of Grade IX students on the sixty-item Attitude Inventory, as well as on each of the four subtests within the Inventory.

The mean scores for Groups 1, 2 and 3 were 171.23, 172.49 and 176.44 respectively, all below the mean score of 197.137 received by Eisner's group.² The differences between the means for Groups 1 and 2,

¹Elliot W. Eisner, "The Development of Information and Attitude Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), p. 47.

²Ibid., p. 55.

2 and 3, and 1 and 3, as shown in Table XVI, were 1.26, 3.95 and 5.21 respectively, on the whole Inventory.

The median, also calculated for Groups 1, 2 and 3, showed the fifty per cent point within each of the three distributions. Table XV shows them to be approximately 169, 171 and 173 for Groups 1, 2 and 3 respectively. The median in each case is slightly lower than the mean, indicating that all three distributions were slightly positively skewed and that the greater proportion of scores fell below the mean of the distributions.

According to the figures in Table XVII, twenty-five per cent of Groups 1, 2 and 3 received scores below 151, 152 and 154 respectively. Half of the students in each of the three groups 1, 2 and 3 scored below 169, 171 and 173 respectively. Seventy-five per cent of Group 1 scored below 189. Three-quarters of Group 2 received scores below 192, while the same percentage of students in Group 3 scored below 198. The middle 50 per cent of the students (interquartile range) in each of Groups 1, 2 and 3, scored between 151 and 189, 152 and 192, and between 154 and 198 respectively.

Table XVIII shows, and Figure 11 illustrates graphically, the similarity of performance by the three Groups of students on the Eisner Art Attitude Inventory.

The greatest difference between Groups 1 and 2 occurred within intervals 141 to 150, and 221 to 230. Within 141 to 150, 13 per cent of Group 1 and 7.9 per cent of Group 2 were to be found. Within interval 221 to 230, 1.6 per cent of Group 1 and 5.8 of Group 2 were located.

The greatest difference between Groups 2 and 3 occurred within interval 151 to 160 where 18.2 per cent of Group 2 scores and 10.6 per

TABLE XV
 MEANS AND MEDIAN FOR GROUPS 1, 2, 3,
 WHOLE TEST AND SUBTESTS, ART ATTITUDES

	Group	Number of Students	Mean	S.D.	Median
Whole test	1	247	171.23	27.86	169
	2	241	172.49	31.08	171
	3	310	176.44	30.86	173
Subtest 1	1	247	43.81	9.59	
	2	241	44.53	9.73	
	3	310	45.72	9.06	
Subtest 2	1	247	32.99	9.95	
	2	241	33.94	11.02	
	3	310	35.47	11.09	
Subtest 3	1	247	46.69	9.21	
	2	241	47.03	10.37	
	3	310	47.15	9.98	
Subtest 4	1	247	47.74	7.28	
	2	241	46.99	8.51	
	3	310	48.10	7.99	

TABLE XVI

DIFFERENCES BETWEEN MEANS FOR GROUPS 1, 2, AND 3,
WHOLE TEST AND SUBTESTS, WHOLE GROUPS AND BY SEX,
ART ATTITUDES

	Groups	Differences between Means		
		Whole Groups	Males	Females
Whole test	1,2	1.26	2.32	2.05
	1,3	5.21	3.41	6.20
	2,3	3.95	1.09	8.24
Subtest 1	1,2	.72	1.06	.41
	1,3	1.91	1.78	1.68
	2,3	1.19	.72	2.10
Subtest 2	1,2	.95	1.01	.31
	1,3	2.48	1.59	3.23
	2,3	1.53	.57	2.93
Subtest 3	1,2	.34	1.35	.91
	1,3	.45	.77	.03
	2,3	.11	.58	.88
Subtest 4	1,2	.75	1.09	1.03
	1,3	.37	.72	1.31
	2,3	1.11	.37	2.34

TABLE XVII

FIRST, SECOND AND THIRD QUARTILES, AND INTERQUARTILE
Q₁-Q₃ FOR GROUPS 1, 2, and 3, ART ATTITUDES

Group	Number of Students	First Quartile	Second Quartile (Median)	Third Quartile	Interquar- tile Q ₁ -Q ₃
1	247	151	169	189	151-189
2	241	152	171	192	152-192
3	310	154	173	198	154-198

TABLE XVIII

PERCENTAGE FREQUENCY TABLE, ART ATTITUDE SCORES FOR GROUPS 1, 2 AND 3

Intervals	Group 1		Group 2		Group 3	
	Number	%	Number	%	Number	%
261-270	1	.4	0	0.0	1	0.3
251-260	0	0.0	0	0.0	1	0.3
241-250	1	.4	0	0.0	4	1.3
231-240	5	2.0	3	1.2	10	3.2
221-230	4	1.6	14	5.8	14	4.5
211-220	11	4.5	13	5.4	21	6.8
201-210	18	7.3	15	6.2	22	7.1
191-200	19	7.7	25	10.4	26	8.4
181-190	26	10.5	15	6.2	28	9.0
171-180	32	13.0	37	15.4	39	12.6
161-170	32	13.0	30	12.4	44	14.2
151-160	37	14.9	44	18.2	33	10.6
141-150	32	13.0	19	7.9	27	8.7
131-140	14	5.7	11	4.6	24	7.7
121-130	12	4.8	6	2.5	10	3.2
111-120	3	1.2	4	1.7	2	0.7
101-110	0	0.0	1	0.4	2	0.7
1-100	0	0.0	4	1.7	2	0.7
247		100.0	241	100.0	310	100.0

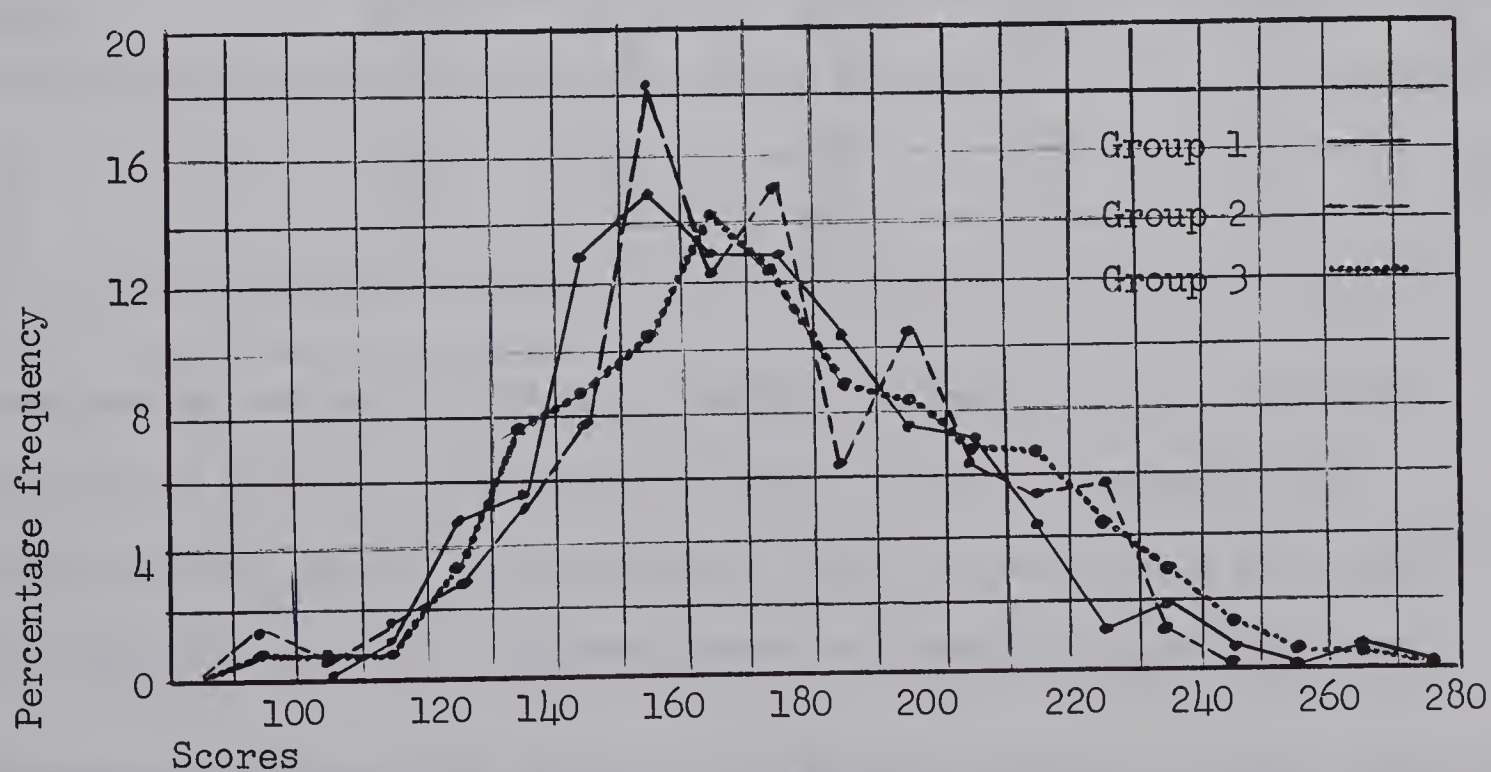


FIGURE 11

TEST PERFORMANCE OF GROUPS 1, 2, 3, ART ATTITUDES

cent of Group 3 scores were located.

The differences between Groups 1 and 3 do not exceed five per cent in any of the intervals.

The highest scores obtained by individuals within Groups 1, 2 and 3 were 266, 237 and 270 respectively, while the lowest score obtained by an individual within Group 1 was 113, within Group 2, 98, and within Group 3, 94.

By extending the vertical lines through the first, second and third quartiles in Figure 12, Appendix D, page 123, overlap from the Group 3 distribution to Groups 1 and 2 was calculated and the results of these calculations are shown in Table XIX.

TABLE XIX

OVERLAP OF DISTRIBUTIONS AT FIRST, SECOND AND THIRD
QUANTILES FOR GROUPS 1, 2 AND 3, ART ATTITUDES

Group	Group 3 Q ₁ = 154		Group 3 Q ₂ = 173		Group 3 Q ₃ = 198	
	above %	below %	above %	below %	above %	below %
1	72	28	46	54	18	82
2	74	26	47	53	21	79
3	75	25	50	50	25	75

Seventy-nine per cent of Group 2 students scored below 198, the third quartile of Group 3. Twenty-one per cent of Group 2 exceeded 198.

Eighty-two per cent of the students in Group 1 scored below 198; only 18 per cent were above 198. Three-quarters of Group 3 scored below 198.

Response Distribution for Five Attitude Zones, Groups 1, 2 and 3, Whole Test

The number of responses under each of the five divisions of the

attitude scale were counted for Groups 1, 2 and 3 and converted to percentages to make comparisons possible. These computations, as set forth in Table XX, illustrate that the greatest percentage of responses by the three groups were clustered around the three middle zones of the five-point attitude scale, indicating an overall tendency toward a "middle-of-the-road" attitude toward art. Only 12, 13 and 14 per cent of the students in Groups 1, 2, and 3 respectively, responded very positively toward certain items on the inventory. Similarly, 19, 20 and 18 per cent of Groups 1, 2, and 3 respectively, responded very negatively to certain items on the test.

TABLE XX

PERCENTAGE DISTRIBUTION OF ATTITUDE RESPONSES IN EACH OF THE FIVE ATTITUDE ZONES FOR GROUPS 1, 2 AND 3, ART ATTITUDES

Attitude Zones	Value of each Response	Group 1 %	Group 2 %	Group 3 %
very positive	5	12	13	14
positive	4	23	23	24
neutral	3	24	24	24
negative	2	22	21	20
very negative	1	19	20	18

The data in the above table seem to indicate that the type of art program presented to the three groups of students did not appear to have an effect on their attitudes toward art; the differences between the three groups for each of the five attitude zones did not exceed 2 per cent, and there is almost complete agreement in the middle zones.

If the art program presented to these three groups of students had had any effect on the development or change of art attitudes, there would have been a shift outward and away from the "middle-of-the-road"

attitude toward the positive or negative zones by Group 2, and even more markedly by Group 3. This has not occurred, according to the findings of this study, and the performance trend is the same throughout for all three groups.

Question 6: Did any differences in the distribution of art attitude scores occur between the males and females within and between each of the three groups of students?

Performance of Male-Female Subgroups, Within Groups, Whole Test

Further analysis of the three groups of students was undertaken to determine whether any differences in performance on the attitude inventory could be detected between the two sexes within each group. Groups 1, 2 and 3 were subdivided into two groups each, making a total of six subgroups in all. For the purpose of this study, the six subgroups were labelled as follows:

Group 1: Females 1F
Males 1M,

Group 2: Females 2F
Males 2M, and

Group 3: Females 3F
Males 3M.

Comparisons were then made between the two subgroups within each of Groups 1, 2 and 3-- 1F and 1M, 2F and 2M, 3F and 3M, and between these three pairs of subgroups.

As our culture tends to regard art activity as essentially a feminine endeavour,³ it seems reasonable to assume that girls will score

³Ibid., p. 46.

higher than boys on an art attitude inventory, thus indicating more positive attitudes toward art.

The figures in Table XXI indicate that the girls in each of the three groups did score consistently higher than the boys on the sixty-item attitude inventory. The mean scores for Group 1 males and females were 162.99 and 181.66 respectively, showing a mean difference of 18.67 in favour of the girls. Group 2 males and females averaged 165.31 and 179.61 respectively, with a 14.30 difference favouring the girls. The mean score for the males in Group 3 was 166.40 while that of the females was 187.86, or 21.46 greater than the males' mean score.

The medians of 161 and 179 for Groups 1M and 1F respectively, 163 and 178 for 2M and 2F, and 165 and 186 for 3M and 3F respectively, as shown in Table XXI, were all slightly smaller than the mean scores for each subgroup, indicating a slight positive skewness in all the six distributions. This means that a greater portion of the scores was clustered around the middle and lower half of each distribution.

Tables XXII and XXIII show, and Figures 13 to 15 illustrate graphically, the number of students found within each of the intervals, for example, 8.3 per cent of Group 1 females and 16.7 of Group 1 males scored between 141 and 150. Ten per cent of the males, and 5.8 per cent of the females in Group 2 were in this interval. In Group 3, 10.3 per cent of the males and 6.9 per cent of the females scored between 141 and 150. It is evident from these figures that almost twice as many boys as girls scored in this interval for each of the groups studied.

The next few paragraphs present more specific data within the three pairs of subgroups and between the three pairs of subgroups.

TABLE XXI

MEANS, MEDIANS AND DIFFERENCES BETWEEN MEANS,
MALE-FEMALE SUBGROUPS, 1M and 1F, 2M AND 2F,
3M AND 3F, ART ATTITUDES

Male				Female			Mean Dif- ferences
Mean	S.D.	Median	Mean	S.D.	Median		
GROUP 1							
Whole test	162.99	26.05	161	181.66	26.66	179	18.67
Subtest							
1	40.89	9.62		47.50	8.21		6.61
2	30.87	10.03		35.67	9.22		4.80
3	45.81	9.07		47.82	9.30		2.01
4	45.41	7.04		50.68	6.49		5.27
GROUP 2							
Whole test	165.31	29.34	163	179.61	31.23	178	14.30
Subtest							
1	41.95	8.94		47.08	9.84		5.13
2	31.88	11.03		35.98	10.67		4.10
3	47.16	10.37		46.91	10.41		0.25
4	44.32	8.11		49.64	8.08		5.32
GROUP 3							
Whole test	166.40	28.44	165	187.86	29.59	186	21.46
Subtest							
1	42.67	8.45		49.18	8.48		6.51
2	32.45	10.54		38.90	10.74		6.45
3	46.58	9.61		47.79	10.38		1.21
4	44.69	7.51		51.99	6.66		7.30

TABLE XXII

PERCENTAGE FREQUENCY TABLE, SCORES FOR THREE MALE
SUBGROUPS, WHOLE TEST, ART ATTITUDES

Intervals	Group 1M		Group 2M		Group 3M	
	Number	%	Number	%	Number	%
241-250	1	.7	0	0.0	1	.6
231-240	3	2.2	1	.8	2	1.2
221-230	0	0.0	4	3.3	3	1.8
211-220	1	.7	6	5.0	8	4.9
201-210	6	4.3	4	3.3	10	6.0
191-200	8	5.8	10	8.3	8	4.9
181-190	14	10.1	3	2.5	14	8.5
171-180	15	10.9	20	16.7	22	13.3
161-170	21	15.2	17	14.3	28	17.0
151-160	20	14.5	23	19.2	19	11.5
141-150	23	16.7	12	10.0	17	10.3
131-140	13	9.4	7	5.8	18	10.9
121-130	10	7.3	5	4.2	9	5.5
111-120	3	2.2	4	3.3	2	1.2
101-110	0	0.0	1	.8	2	1.2
1-100	0	0.0	3	2.5	2	1.2
	138	100.0	120	100.0	165	100.0

TABLE XXIII

PERCENTAGE FREQUENCY TABLE, SCORES FOR THREE FEMALE
SUBGROUPS, WHOLE TEST, ART ATTITUDES

Intervals	Group 1F		Group 2F		Group 3F	
	Number	%	Number	%	Number	%
261-270	1	.9	0	0.0	1	.7
251-260	0	0.0	0	0.0	1	.7
241-250	0	0.0	0	0.0	3	2.1
231-240	2	1.8	2	1.7	8	5.5
221-230	4	3.7	10	8.3	11	7.6
211-220	10	9.2	7	5.8	13	8.9
201-210	12	11.0	11	9.1	12	8.3
191-200	11	10.1	15	12.4	18	12.4
181-190	12	11.0	12	9.9	14	9.7
171-180	17	15.6	17	14.1	17	11.7
161-170	11	10.1	13	10.7	16	11.0
151-160	17	15.6	21	17.3	14	9.7
141-150	9	8.3	7	5.8	10	6.9
131-140	1	.9	4	3.3	6	4.1
121-130	2	1.8	1	.8	1	.7
111-120	0	0.0	0	0.0	0	0.0
101-110	0	0.0	0	0.0	0	0.0
1-100	0	0.0	1	.8	0	0.0
	109	100.0	121	100.0	145	100.0

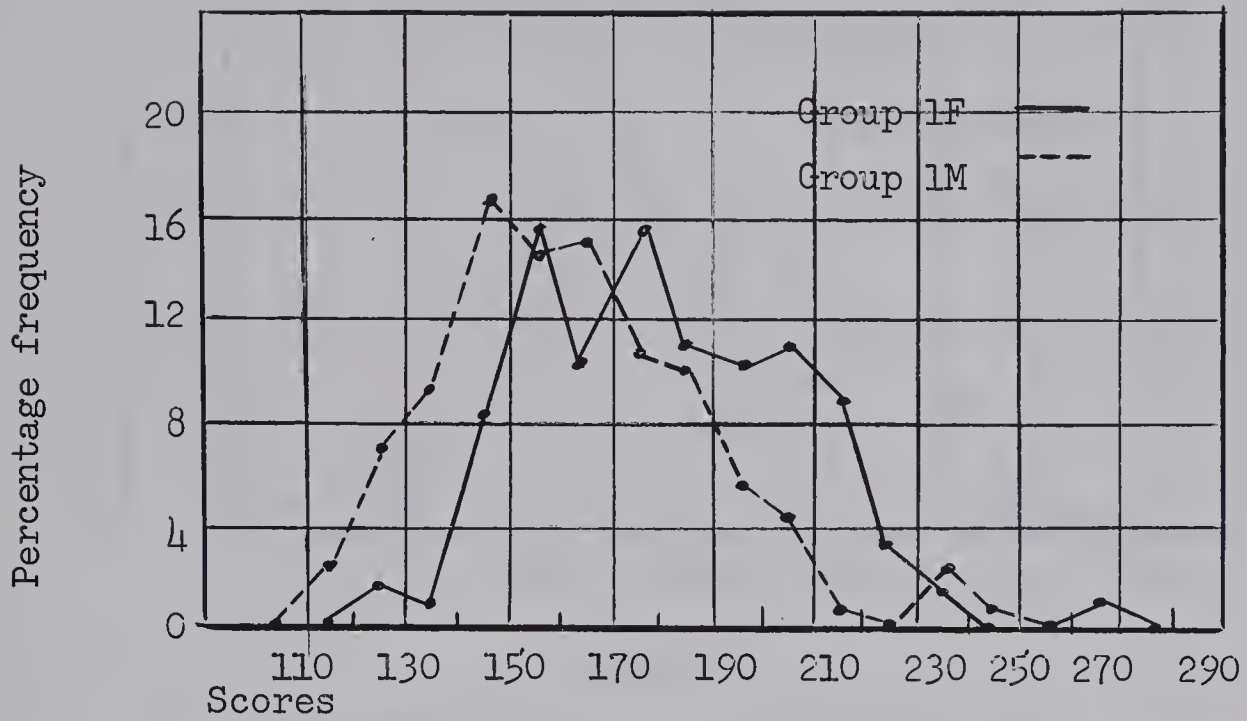


FIGURE 13

TEST PERFORMANCE OF GROUPS 1F AND 1M,
ART ATTITUDES

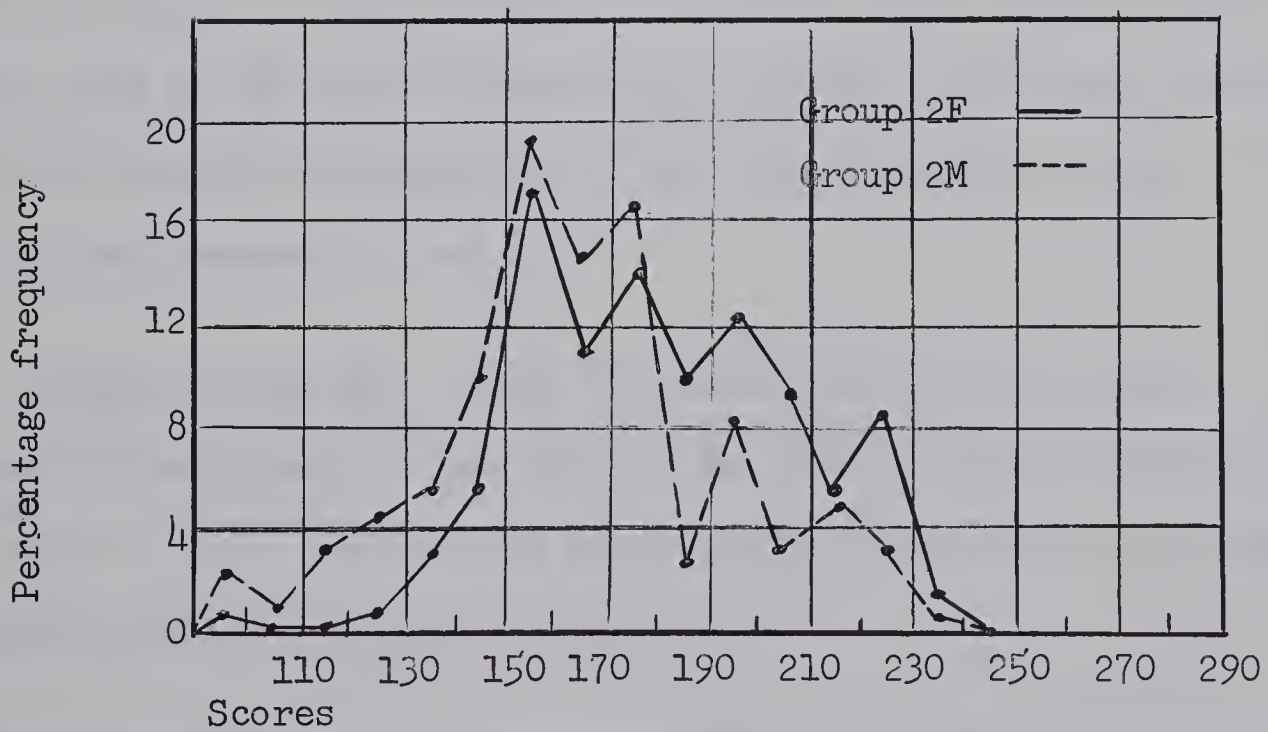


FIGURE 14

TEST PERFORMANCE OF GROUPS 2F AND 2M,
ART ATTITUDES

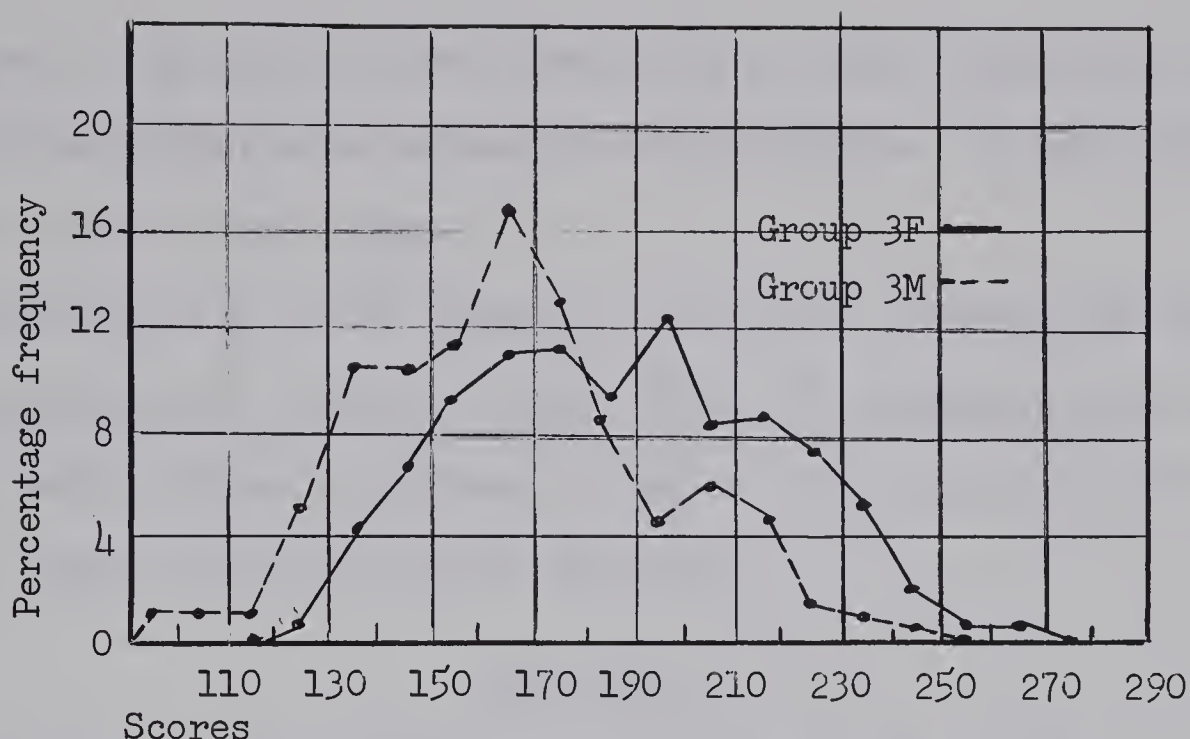


FIGURE 15

TEST PERFORMANCE OF GROUPS 3F and 3M,
ART ATTITUDES

1F and 1M. The greatest differences between Group 1 males and females occurred between 120 and 140, and between 190 and 210, as illustrated in Figure 13. Boys' scores were more numerous than were girls' scores in the 121 to 140 category-- 16.7 per cent of the boys and only 2.7 per cent of the girls scored here. The 191 to 210 range shows a complete reversal--10.1 per cent of the boys and 21.1 per cent of the girls scored between 191 and 210.

Groups 2F and 2M. Groups 2F and 2M differed as follows: 10 per cent of the males and 4.1 per cent of the females scored between 121 and 140, while 11.6 per cent of the males and 21.5 per cent of the females received scores between 191 and 210.

Groups 3F and 3M. The greatest differences between Group 3 males and females, as in the two previous pairs of subgroups, occurred between 121 and 140, and between 191 and 210. Sixteen per cent of the boys and

5 per cent of the girls scored between 121 and 140. Eleven per cent of the boys received scores between 191 and 210 while 21 per cent of the girls scored in this range.

From Figures 16 to 18, Appendix D, pp.124-6, overlap was computed and the resulting data set out in Table XXIV. For example, 91 per cent of Group 1 males scored below Group 1 females' third quartile of 202; only 9 per cent of the boys scored above 202.

TABLE XXIV

OVERLAP OF DISTRIBUTIONS AT FIRST, SECOND AND THIRD
QUARTILES, GROUPS 1F AND 1M, 2F AND 2M, AND 3F AND 3M,
ART ATTITUDES

GROUPS 1F and 1M

91% of males below girls' Q_3 (202); 9% males above 202
76% of males below girls' Q_2 (179); 24% males above 179
49% of males below girls' Q_1 (159); 51% males above 159

GROUPS 2F and 2M

86% of males below girls' Q_3 (199); 14% males above 199
76% of males below girls' Q_2 (179); 24% males above 179
44% of males below girls' Q_1 (157); 56% males above 157

GROUPS 3F and 3M

92% of males below girls' Q_3 (211); 8% males above 211
77% of males below girls' Q_2 (187); 23% males above 187
49% of males below girls' Q_1 (165); 51% males above 165

According to the figures in Table XXV, 72 per cent, 68 per cent and 71 per cent of the girls' groups (1F, 2F and 3F respectively), received scores greater than the mean scores of their male counterparts. Only 16, 25 and 21 per cent of the males' groups (1M, 2M and 3M respectively), exceeded the mean scores of their female counterparts. The

figures show that a greater percentage of females scored above the males' mean than males above the girls' mean for each of the three groups studied.

TABLE XXV

MALE SCORES ABOVE FEMALES' MEAN SCORES, AND FEMALE SCORES ABOVE MALES' MEAN SCORES FOR GROUPS 1, 2, 3, ART ATTITUDES

Group	Male		Female		Percentage of			
	Mean	Median	Mean	Median	Male scores above and below females' mean		Female scores above and below males' mean	
					Above	Below	Above	Below
1	162.99	160.5	181.66	179.0	16	84	72	28
2	165.31	163.4	179.61	178.5	25	75	68	32
3	166.40	165.3	187.86	186.6	21	79	71	29

The highest individual score received by the males of Group 1 was 246 and the lowest 113, while their female counterparts' highest individual score was 266 and the lowest score 121. Group 2 males' highest and lowest individual scores were 233 and 98, while Group 2 females' high and low individual scores were 237 and 126. The high and low individual scores for Group 3 males were 242 and 94 while their female counterparts recorded an individual high score of 270 and an individual low score of 130.

Performance of Male-Female Subgroups, Between Groups, Whole Test

From the material presented in the last section, the following observations were made:

1. Within and between each pair of subgroups, the females scored

consistently higher than the males.

2. The medians were lower than the means in each of the three pairs of distributions, indicating the major portion of the scores fell below the mean of each distribution.

3. While the three girls' groups scored consistently higher than did the boys' groups, both sexes' test performances, as shown in Figures 13 to 15, pages 70 and 71, were similar in nature.

4. The overlapping frequency distributions recorded in Figure 19, Appendix D, page 127, show that the three groups of males performed in highly similar fashion on the Attitude Inventory.

5. Figure 20, Appendix D, page 128, illustrates that the three groups of females performed in highly similar fashion on the Attitude Inventory.

6. The frequency distribution curves for the three groups of females were more symmetrical and less peaked than those of the three groups of males. (Figures 19 and 20, Appendix D, pages 127-128)

7. The differences between the three pairs of subgroups with regard to high and low scores were not very great, as shown in Figures 13 to 15, pages 70 and 71, and Figures 16 to 18, Appendix D, pages 124-126. Few "very high" and "very low" scores were recorded for each of the three pairs of subgroups.

Performance of Male-Female Subgroups, by Subtest

The data in Table XXI, page 68, indicated that the girls scored consistently higher than the boys on each of the four subtests. For Subtest 1, the differences between the means ranged from 5.13 to 6.61; from 4.10 to 6.45 for Subtest 2; from 0.25 to 2.01 for Subtest 3; and

from 5.27 to 7.30 for Subtest 4 for the three student groups. Further discussion of the male-female subtest performance will take place in the next two sections.

Response Distribution for Five Attitude Zones for Male-Female Subgroups, Whole Test

The art attitude scale, as described at the beginning of this chapter, contains five zones, from the "very negative", receiving one point, to the "very positive", which received five points. Responses in each of these five zones were counted in order to determine where, on the five-point scale, the majority of male-female responses were located.

The data in Table XXVI give the percentage distribution of responses for these five zones for the six subgroups. From these figures the following observations were made:

1. The greatest number of Group 1, 2 and 3 male responses was clustered fairly equally around each of the four lower attitude zones.
2. The greatest number of Group 1, 2 and 3 female responses was clustered fairly equally around the three middle attitude zones.
3. The females in each of the three groups responded with a greater number of "very positive" responses than did the males in Groups 1, 2 and 3.
4. The males in each of the three groups responded with a greater number of "very negative" responses than did the three groups of females. The percentage of male "very negative" responses was approximately twice the number of male "very positive" responses.
5. Both male and female responses were clustered fairly equally around the three middle zones of the attitude scale for the six subgroups

of students, ranging anywhere from 19 to 26 per cent.

TABLE XXVI

PERCENTAGE DISTRIBUTION OF ATTITUDE RESPONSES FOR EACH OF THE
FIVE ATTITUDE ZONES, MALE-FEMALE SUBGROUPS, ART ATTITUDES

Attitude	Value of each Response	Group 1		Group 2		Group 3	
		1M	1F	2M	2F	3M	3F
		per cent		per cent		per cent	
Very positive	5	11	14	11	15	11	17
Positive	4	20	26	21	25	21	26
Neutral	3	24	24	23	24	23	24
Negative	2	22	22	21	20	23	19
Very negative	1	23	14	24	16	22	14
		100	100	100	100	100	100

Response Distribution for Five Attitude Zones for Male-Female Subgroups,
by Subtest

The figures in Table XXVII present the responses for each of the five zones of the attitude scale, by subtest, for each of the six subgroups. The findings were as follows:

Subtest 1. The females in each of the three groups accounted for a greater percentage of "very positive" responses than did the three groups of males.

The males accounted for a greater proportion of "very negative" responses than did their female counterparts.

The three groups of males' responses clustered fairly evenly around the "very negative" to "positive" zones with the greatest percentage in the "neutral" zone, while the three female groups' responses clustered around the "negative" to "very positive" zones, with the greatest percentage of responses in the "positive" zone.

Subtest 2. Each of the male and female groups' greatest percentage of responses occurred in the "very negative" range. The greatest difference between the males and females for Groups 1, 2 and 3 occurred within the "very negative" zone, the males being more negative than the females.

Subtest 3. The percentage of responses in Subtest 3 is fairly evenly distributed between Group 1, 2 and 3 males and females in each of the five zones of the attitude scale.

Subtest 4. The females in each group registered more "very positive" and fewer "very negative" responses than did the males. The majority of responses is fairly evenly clustered around the middle or central zones of the attitude scale for both the three male and the three female groups.

TABLE XXVII

PERCENTAGE DISTRIBUTION OF ATTITUDE RESPONSES FOR EACH OF THE FIVE
ATTITUDE ZONES, MALE-FEMALE SUBGROUPS, BY SUBTEST, ART ATTITUDES

Attitude	Group 1		Group 2		Group 3	
	Male %	Female %	Male %	Female %	Male %	Female %
<u>Subtest 1</u>						
Very positive	10	16	11	17	11	18
Positive	19	28	22	27	22	30
Neutral	27	24	25	23	26	25
Negative	20	21	20	19	22	16
Very negative	23	11	22	13	19	11
No response	1	0	0	1	0	0
	100	100	100	100	100	100
<u>Subtest 2</u>						
Very positive	5	8	6	8	6	11
Positive	9	13	10	13	10	15
Neutral	17	23	17	22	19	23
Negative	25	22	24	24	25	23
Very negative	44	34	43	32	40	28
No response	0	0	0	1	0	0
	100	100	100	100	100	100
<u>Subtest 3</u>						
Very positive	14	13	16	16	12	16
Positive	26	32	28	26	31	28
Neutral	26	25	24	27	24	25
Negative	21	23	18	20	21	21
Very negative	13	7	14	11	12	10
No response	0	0	0	0	0	0
	100	100	100	100	100	100
<u>Subtest 4</u>						
Very positive	14	17	13	19	13	24
Positive	25	34	23	30	25	30
Neutral	25	24	25	25	25	23
Negative	23	20	22	18	23	16
Very negative	13	5	17	8	15	7
No response	0	0	0	0	0	0
	100	100	100	100	100	100

CHAPTER VII

FINDINGS: PART II OF THE STUDY: RELATIONSHIPS

Chapter VII deals with Question 7, "Did there appear to be any relationship between art attitude and art information scores for the three groups of students obtained on the Eisner Art Attitude and Information Inventories?"

Tables XXVIII to XXX indicate coefficients of correlation among whole and subtest scores within and between tests for Groups 1, 2 and 3. Since coefficients of correlation vary from -1.00 to +1.00, the degrees of association will be designated as follows:

1. From 0 to about .20--slight or negligible correlation,
2. From about .20 to .40--low degree of correlation,
3. From about .40 to .70--moderate degree of correlation,
4. From about .70 to .90--high degree of correlation, marked relationship,
5. From about .90 to 1.00--very high correlation.

These figures apply equally to both positive and negative correlation coefficients.¹

Correlation Between Art Attitude and Art Information, Groups 1, 2 and 3

Coefficients of correlation between art attitude and art information subscores and between art information and attitude whole scores tended to be in the 10's, 20's and 30's, indicating negligible to a low degree of correlation between art attitudes and art knowledge for Groups 1, 2 and 3.

¹J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), p. 145.

The correlation coefficients for total attitude and total information were .279, .201 and .336 for Groups 1, 2 and 3 respectively. Although the relationship is a positive one for each of the three groups, it nevertheless indicates a low degree of correlation between art attitudes and art knowledge. Eisner's findings show a .278 correlation coefficient between total attitude and total information, a relationship that is a positive one, but nevertheless a small one.²

²Elliott W. Eisner, "The Development of Information and Attitude Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), p. 46.

TABLE XXVIII

COEFFICIENTS OF CORRELATION BETWEEN ART ATTITUDE
AND ART INFORMATION SCORES FOR GROUP 1
N = 247

	Subtest	Attitude				Total	Information				
		1	2	3	4		Total	1	2	3	4
Satisfaction in Art	1	1.000									
Voluntary Activity in Art	2	.671	1.000								
Self-estimate in Art	3	.359	.433	1.000							
Attitude Toward Art	4	.445	.408	.382	1.000						
Total Attitude		.827	.825	.706	.673	1.000					
Total Information		.249	.279	.125	.228	.279	1.000				
Art Terms	1	.208	.201	.063	.203	.197	.792	1.000			
Art Media and Process	2	.227	.294	.141	.265	.284	.879	.613	1.000		
Artists and Their Work	3	.148	.155	.091	.171	.174	.631	.328	.428	1.000	
Art History	4	.162	.150	.106	.202	.178	.626	.302	.446	.319	1.000

TABLE XXIX

COEFFICIENTS OF CORRELATION BETWEEN ART ATTITUDE
AND ART INFORMATION SCORES FOR GROUP 2

N = 241

	Subtest	Attitude				Total	Total	Information			
		1	2	3	4			1	2	3	4
Satisfaction in Art	1	1.000									
Voluntary Activity in Art	2	.654	1.000								
Self-estimate in Art	3	.297	.414	1.000							
Attitude Toward Art	4	.435	.406	.430	1.000						
Total Attitude		.784	.855	.672	.679	1.000					
Total Information		.125	.125	.174	.272	.201	1.000				
Art Terms	1	.115	.146	.199	.234	.203	.799	1.000			
Art Media and Process	2	.117	.145	.188	.227	.204	.873	.624	1.000		
Artists and Their Work	3	.012	.018	-.001	.150	.039	.659	.371	.461	1.000	
Art History	4	.115	.065	.133	.252	.154	.594	.301	.375	.306	1.000

TABLE XXX

COEFFICIENTS OF CORRELATION BETWEEN ART ATTITUDE
AND ART INFORMATION SCORES FOR GROUP 3
N = 310

	Subtest	Attitude				Total	Information			
		1	2	3	4		1	2	3	4
Satisfaction in Art	1	1.000								
Voluntary Activity in Art	2	.669	1.000							
Self-estimate in Art	3	.490	.583	1.000						
Attitude Toward Art	4	.525	.527	.379	1.000					
Total Attitude		.818	.874	.777	.715	1.000				
Total Information		.276	.335	.198	.352	.336	1.000			
Art Terms	1	.327	.311	.217	.345	.355	.751	1.000		
Art Media and Process	2	.209	.307	.189	.286	.287	.821	.528	1.000	
Artists and Their Work	3	.186	.200	.145	.183	.211	.623	.316	.354	1.000
Art History	4	.072	.126	.019	.179	.102	.648	.292	.406	.328
										1.000

CHAPTER VIII

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings: Part I of the Study

The findings which are summarized here were based on information received from sixty-two completed Teacher Questionnaires. The purpose of these Questionnaires was to determine the amount of class time devoted to art production and art appreciation activities for the 1967-68 Alberta school year.

Question 1: What was the general nature of the Grade IX art programs in specific Alberta schools for the 1967-68 school year, with particular reference to art appreciation?

The Grade IX art program was primarily a production-oriented one in each of the sixty-two schools whose art teachers participated in the Teacher Questionnaire. The greatest percentage of art class time was set aside for drawing and painting in all of the sixty-two participating schools, with some graphics, sculpture, building and construction, ceramics, and other art activities, if facilities and materials were adequate and readily available. Art appreciation, as defined in this study, did not play a very great role at the Grade IX level due primarily to (1) lack of necessary materials such as reproductions of art works, and (2) great travelling distances to gallery facilities.

Question 2(a): Which art activities, according to the Grade IX art teachers, lent themselves most readily to the inclusion of instruction in art appreciation?

The majority of teachers in the sixty-two schools expressed the opinion that four art areas--art history, visits to galleries and museums, analysis of art works, and the elements and principles of design--made

the greatest contribution to the teaching of art appreciation.

Question 2(b): Which art activities made the greatest contribution toward the development of a good art program at the Grade IX level?

According to the responses of the sixty-two teachers on the Teacher Questionnaire, drawing and painting occupied first place in a good art program at the Grade IX level. Design elements and principles, and sculpture and graphics came second, with other art activities such as art history and analysis of art works mentioned only incidentally.

Summary of Findings: Part II of the Study

The Eisner Art Information and Attitude Inventories were administered to 798 students who were classified as belonging to Group 1 (zero to 20% art appreciation), Group 2 (20 to 32% art appreciation), and Group 3 (33% and over) art appreciation. The results of these Inventories are summarized below.

Question 3: Did the art program offered have any bearing on the distribution of art information scores obtained by the three groups of students on the Eisner Art Information Inventory?

The findings showed an overall similarity of test performance by the students in Groups 1, 2 and 3. All three distributions exhibited a slight positive skewness, indicating that a greater portion of the scores were below the mean of each distribution.

The mean scores, 24.29, 24.28 and 25.76 or 42 per cent, 42 per cent and 44 per cent for Groups 1, 2 and 3 respectively, were all below the mean of 30.39 (50 per cent) for Eisner's group at the Grade

IX level.¹ According to calculations, 78 per cent, 78 per cent and 75 per cent of Groups 1, 2 and 3 respectively, scored below thirty.

The highest scores received by each of the three groups of students were achieved in answer to questions dealing with art media and processes, and art terms. With regard to the questions about artists and their work, the three groups of students received mean scores which were lower than their mean scores on the art production-oriented questions. The three groups of students did least well on the questions which dealt with art history. While the mean scores for each of the four subtests differed, nevertheless Groups 1, 2 and 3 exhibited a similarity of test performance on each of the four subtests of the Art Information Inventory.

Question 4: Did any differences in the distribution of art information scores occur between the males and females within and between each of the three groups of students?

The females within each of Groups 1, 2 and 3 received higher mean scores than did their male counterparts on the Art Information Inventory. Although the females scored higher than the males, a similarity of test performance was in evidence. All six distributions exhibited a slight positive skewness. The frequency distribution curves for the females were more symmetrical and less peaked than those of the males.

Both sexes however, were below the mean scores of 28.06 (47%) for the males and 31.50 (53%) for the females obtained by the Grade IX students who participated in Eisner's study.² Group 1, 2 and 3 girls

¹Elliot W. Eisner, "The Development of Information and Attitudes Toward Art at the Secondary and College Levels", Studies in Art Education (Washington: National Art Education Association, Fall, 1966), p. 45.

²Ibid., p. 52.

in the present study averaged 25.69 (44%), 25.65 (44%) and 27.40 (47%) respectively, while Group 1, 2 and 3 boys received means of 23.18 (40%), 22.89 (40%) and 24.32 (42%) respectively.

The females in Groups 1, 2 and 3 were more knowledgeable than their male counterparts with regard to art terms, art media and processes, and art history. Knowledge about artists and their works appeared to be evenly distributed between the sexes in Groups 1, 2 and 3.

Question 5: Did the art program offered have any bearing on the distribution of art attitude scores obtained by the three groups of students on the Eisner Art Attitude Inventory?

Along with the Art Information Inventory, the three groups of students completed the sixty-item Eisner Art Attitude Inventory.

Overall test performance by Groups 1, 2 and 3 on the Art Attitude Inventory appeared to be similar in nature--all three distributions showed slight positive skewness.

The mean scores of 171.23, 172.49 and 176.44 for Groups 1, 2 and 3 respectively, were all below the established norm of 180 for the Art Attitude Inventory³, and the mean of 197.137 received by Eisner's group.⁴ Sixty-six per cent of Group 1, 65 per cent of Group 2 and 60 per cent of Group 3 scored below 180.

When the number of responses in each of the five attitude zones of the attitude scale were counted for each of Groups 1, 2 and 3, the results showed an overall "middle-of-the-road" or neutral attitude toward art on the part of the Grade IX students who participated

³Ibid., p. 47.

⁴Ibid., p. 55.

in this study. Neither Group 2 nor Group 3 showed any response shift away from the neutral zone toward a more positive or a more negative art attitude.

Groups 1, 2 and 3 indicated an art attitude that was on the positive side toward certain art activities, personal art ability and art classes, and toward artists and their works, but a negative attitude toward voluntary activity in art. It is evident that the three groups of students participated very little in extracurricular art activities.

Question 6: Did any differences in the distribution of art attitude scores occur between the males and females within and between each of the three groups of students?

The mean scores of 181.66, 179.61 and 187.86 for Group 1, 2 and 3 females respectively, and 162.99, 165.31 and 166.40 for the males in Groups 1, 2 and 3 respectively, show that the females possessed more positive attitudes toward art than their male counterparts. Although the females scored higher than the males, each of the sexes showed a similarity of test performance--all six distributions showed slight positive skewness, while frequency distribution curves for the females were more symmetrical and less peaked than those of the three groups of males.

The females accounted for a greater portion of "very positive" responses while the males received more "very negative" responses on the sixty-item Attitude Inventory. Neither the males nor the females in Group 2 or Group 3 showed any response shift away from the neutral art zone toward a more positive or a more negative attitude.

Regarding art activities such as painting, sketching, poster-making and ceramics, the females in each of the three groups were more

positive than their male counterparts.

It seems that very little time was set aside, by both males and females, for extracurricular art activities since negative attitudes toward voluntary art activity were expressed by males and females in Groups 1, 2 and 3.

As to personal art ability and art classes, the males and females in each of Groups 1, 2 and 3 appeared to share the same feelings--an art attitude that tended toward the positive side.

With regard to artists and art works, the findings indicated an art attitude that showed a tendency toward the positive side on the part of both males and females in Groups 1, 2 and 3; the females were more positive than their male counterparts.

Question 7: Did there appear to be any relationship between art attitude and art information scores for the three groups of students obtained on the Eisner Art Attitude and Information Inventories?

The students in Groups 1, 2 and 3 showed a low, positive relationship between art attitude and art information scores, the coefficients of correlation being .279, .201 and .336 for Groups 1, 2 and 3 respectively.

CONCLUSIONS

The conclusions for Part I of this study were as follows:

1. The art programs at the Grade IX level for the 1967-68 school year were production-oriented ones in the schools under study, with drawing and painting as the dominant art activities. Art appreciation played a very minor role in these art programs.

2 (a). The participating teachers believed that art appreciation should consist primarily of four areas of study, namely, art history, analysis of art works, visits to museums and galleries, and the elements and principles of design.

2 (b). The teachers who participated in the initial Teacher Questionnaire believed that a good art program at the Grade IX level was an art production-oriented one.

The conclusions for Part II of the study were as follows:

3. The results of this study tend to indicate that the type of Grade IX art program the three groups of students participated in during the 1967-68 school year did not appear to influence their performance in art as measured by the Eisner Art Information Inventory. Test performance by Groups 1, 2 and 3 was similar in nature.

4. Regarding test performance, by sex, on the Eisner Art Information Inventory, the findings indicated that while the three groups of females scored consistently higher than their male counterparts, the type of art programs the three groups of students participated in did not appear to influence their performance in art.

5. The findings regarding art attitudes tend to indicate that the type of art programs the three groups of students participated in during the 1967-68 school year did not appear to influence their attitudes toward art, as measured by the Eisner Art Attitude Inventory.

6. While the three groups of females showed more positive attitudes toward art than their male counterparts, the findings indicate that the art programs the male-female subgroups participated in did not appear to influence their attitudes toward art, as measured by the Eisner Art

Attitude Inventory.

7. There did not appear to be a high relationship between art attitude and art information scores for the students in Groups 1, 2 and 3. A high score in art knowledge does not necessarily mean a very positive art attitude nor does a positive attitude toward art ensure a high score with regard to art knowledge.

RECOMMENDATIONS

Implications and Recommendations for Educational Practice

The findings revealed that art appreciation played a minor role in the art programs of the sixty-two participating schools. In addition, performance by the students who had had limited exposure to art appreciation was similar to the performance of the students who spent over 33 per cent of their time in the study of art appreciation. This may indicate a need to study within our schools, the qualitative as well as the quantitative aspects of the teaching of art appreciation. There may be a need, as well, to stimulate and reinforce positive attitudes toward art.

In such cases, consideration might be given to involving adolescents with those manifestations of art that they are likely to encounter every day--the clothes they wear, television and films, community planning, product design, spacecraft design, photography, and the printed page, as well as conventional art forms such as painting, sculpture and architecture, traditional and modern.

It might be beneficial to structure more opportunities for direct contact by the students with original art works, as well as direct

experience in discussing, comparing and evaluating the many art objects that already exist in the community--for example, the paintings of local artists and the works of local sculptors and potters.

Other possibilities include the invitation of practicing artists to the art class so that boys may be able to see that art is not primarily the feminine activity which they may have been led to believe. In addition to visiting artists, there may be films shown portraying artists at work which might be of interest to the adolescent.

The university may also contribute to the development of qualitative judgment on the part of teachers by providing, within art teacher preparation courses, opportunities to discuss, to evaluate, and to formulate programs in art appreciation. In-service workshops have been organized by teachers for the solution of problems in the art production area; perhaps in-service workshops concerned with art appreciation problems might be equally valid.

It is hoped that the above suggestions may indicate possible avenues for exploration by the educator in the realm of art appreciation.

Recommended Research

A study is recommended which would try to determine whether socio-economic and cultural levels have any effect on student performance on the Eisner Art Information and Attitude Inventories. A comparison of test performances could be made between different racial and cultural groups, for example, Indian, Anglo-Saxon, Eastern European, or Asian. Are the two Inventories adequate for this purpose? Are they adequate for the overall Canadian Scene?

Professor Eisner administered the Art Information and Attitude Inventories to students in American schools from Grade IX to college level. A replication of this type of study could be performed in Alberta to determine student knowledge in art and student attitudes toward art at all grade levels of the secondary school or, among certain grades, for example, Grades VIII, IX and X. Does knowledge about art increase with each grade? Do attitudes toward art become more positive?

It would be worthwhile to measure either knowledge about art and/or attitudes toward art using a smaller population and analysing each of the items on the test to determine the level of a student's art knowledge and/or his attitude toward certain specific aspects of art.

The Eisner Art Information and Attitude Inventories are only two of a very small number of such art-measuring instruments. More tests of this nature are needed in art education to cover all aspects of art and attitudes toward art. More research needs to be done at this time in the area of developing art instruments.

The above ideas suggest possibilities for a few of the many studies that could and should be undertaken in the area of art knowledge and attitudes toward art.

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APPENDIX A

INSTRUMENTS UTILIZED IN THE STUDY

Questionnaire to Teachers

1. I teach art to (how many) _____ Grade IX classes this year (1967-68).
2. Please state how many students you have in each Grade IX art class.
_____ ; _____ ; _____ ; _____
3. Did you teach art last year at your present school? Yes _____ No _____
If yes, to which grades? _____
4. From what socio-economic group do most of your students come? (Please check ✓)
1. professional _____ 2. business _____ 3. blue collar, working _____
4. a mixture of these groups _____.
5. This question deals with the present art program in your school. I would appreciate it if you would fill in a) the approximate number of hours you have devoted to each art activity for the year 1967-68, and b) your reasons for non-inclusion of any of the art activities listed below. (Complete all columns).

	(1)	(2)	(3)
	Approximate <u>number</u> of hours devoted to art activity for the year 1967- 68 (Grade IX)	I have not included this art activity because of lack of facilities	It is of little importance
Art Activity			
Ceramics and Pottery			
Drawing and Painting			
Building & Constructing			
Art History			
Sculpture			
Analysis of Art Works			
Graphics			
Stitchery & Fabrics			
Environmental Studies: Interior Design			
Architecture			
Visits to museums & galleries			
Photography			

Questionnaire to Teachers (Continued)

	(1)	(2)	(3)
Cartooning			
Design (elements and principles)			
Theatre Arts (set design, etc.)			
Other			
Your total (hours)			
TOTAL art hours for the year 1967-68)			

6. Please state, in order of priority, the art activities that you consider most appropriate to a good art program in a school, according to the art activities listed in Question 5. (Please list only three art activities)

1. _____ 2. _____ 3. _____

7. Please list, in order of priority, the art activities that you consider most appropriate to the development of the capacity for appreciating art works.

1. _____ 2. _____ 3. _____

8. List those art and/or art education courses taken as part of your formal academic and professional training. Please list the "name" of the course, e.g. drawing, etc.

Art	Art Education	In-service, other

THE EISNER ART INFORMATION INVENTORY*

1. In a painting texture has to do with
 - a. the colour of the paint used
 - b. lightness-darkness
 - c. pastel paint
 - d. the surface of the material
 - e. the type of media that are used.
2. Cool colours are
 - a. blue, yellow, orange
 - b. red, yellow, orange
 - c. blue, green, gray
 - d. blue, green, red
 - e. green, blue, orange
3. Primary colours are
 - a. red, orange, blue
 - b. yellow, blue, red
 - c. red, yellow, green
 - d. green, blue, purple
 - e. green, purple, orange
4. Secondary colours are
 - a. red, yellow, blue
 - b. red, green
 - c. blue, green, orange
 - d. purple, brown
 - e. green, orange, purple
5. Hue refers to
 - a. lightness-darkness
 - b. brightness-dullness
 - c. cool colours
 - d. value
 - e. color
6. Value refers to
 - a. brightness-dullness of colour
 - b. hue
 - c. intensity of colour
 - d. lightness-darkness of colour
 - e. coolness of colour
7. Symmetry refers to
 - a. a characteristic of paint
 - b. the organization of visual elements
 - c. the type of paint used by the artist
 - d. the type of colours used by the artist
 - e. the way texture is created
8. Volume refers to
 - a. a flat plane
 - b. a type of colour
 - c. a style of painting
 - d. an illusion of solidity
 - e. an oval painting
9. Abstract art is
 - a. a style of art
 - b. a major art collection
 - c. a way of displaying paintings
 - d. a style of paint texture
 - e. an important period during the Renaissance.

*This Inventory cannot be used or reproduced without the permission of Professor Eisner.

10. Opaque refers to
- colours which are bright
 - colours which are dull
 - colours which are transparent
 - colours which are not transparent
 - colours of low intensity
11. Perspective refers to
- lightness-darkness
 - the colour of objects
 - line drawing
 - two dimensions
 - the illusion of depth
12. Composition refers to
- the arrangement of all the elements in an art work
 - the colour of an art work
 - the tools the artist uses
 - the medium of an art work
 - the material used to frame the painting
13. Foreground refers to
- a type of grounding used in paint
 - a type of painting method used by artists
 - an area in a painting
 - a style of landscape painting
 - a type of art media
14. Balance in a painting refers to
- an arrangement among elements
 - an impressionist's arrangement of colour
 - the subject matter of a work art
 - rectangles and ovals
 - circles and triangles
15. Contour refers to
- the quality of texture used
 - the illusion of movement in a painting
 - a style of architecture
 - the edge of a form or shape
 - an art process similar to lithography
16. An art medium is
- the material with which the artist works
 - the period in which the work was done
 - the style of painting the artist uses
 - the tool the artist uses
 - the way a painting is organized on the canvas
17. The area of graphics includes
- painting, etching, sculpture
 - etching, lithography, engraving
 - water colour, pastel, oil
 - woodcut, pastel, tempera
 - architecture, sculpture, pottery
18. Mobiles are
- marble statues
 - a type of pottery
 - sculptures with moving parts
 - papier mache sculpture
 - surrealist paintings that move through space

19. A collage is
- a. a type of abstract sculpture
 - b. an architect's plan
 - c. a silk screen print
 - d. a group of 2 or 3-dimensional objects applied to a surface
 - e. a large collection of art objects
20. A pallet is used to
- a. carve with
 - b. paint on
 - c. put a canvas on
 - d. make pottery
 - e. mix paint on
21. A bas relief is
- a. a type of lounge found in art museums
 - b. a type of building
 - c. a Byzantine church
 - d. a type of sculpture in which the figures are raised slightly from the background
 - e. a type of architecture in which steel and glass play an important part
22. Architects design
- a. sculpture
 - b. buildings
 - c. pottery
 - d. furniture
 - e. cloth
23. An example of a 3-dimensional object is
- a. a painting
 - b. a sculpture
 - c. a lithograph
 - d. a drawing
 - e. an etching
24. A pallet knife is often used to
- a. apply paint
 - b. carve wood
 - c. chisel stone
 - d. decorate pottery
 - e. cut wire
25. A mural painting that requires wet plaster for its surface is called a
- a. muricast
 - b. fresco
 - c. relief
 - d. lime plaster
 - e. siraglia
26. Which of the following is not a medium used in the visual arts
- a. chalk
 - b. rectangles
 - c. oils
 - d. clay
 - e. stone

27. Oil paints are differentiated from tempera colours by
- the kinds of pictures one can paint with them
 - the base used in the paint
 - the brush strokes which one can see in the finished work
 - the variety of colours one may use
 - the size of the picture one can paint with them
28. The medium called "pastels" is
- pale washed out water colours
 - light coloured oil colours
 - a way of applying chalks
 - coloured chalks
 - technique which gives a light airy quality to paintings
29. A mosaic is
- a type of sculpture
 - an arrangement of small stones, pieces of coloured paper or coloured glass
 - an arrangement of highly glazed water colours
 - an important tool in the application of clay to an armature
 - a style of architecture and design
30. A lithograph is
- a type of sculpture
 - a type of painting
 - a type of building
 - a type of mobile
 - a type of print
31. Frank Lloyd Wright was
- a potter
 - an architect
 - a sculptor
 - a water colourist
 - an oil painter
32. Norman Rockwell is
- an abstract painter
 - a cubist sculptor
 - a potter
 - a popular realistic painter
 - an architect
33. Designing architecture is the primary work of
- Picasso
 - Rouault
 - Sullivan
 - Mondrian
 - Klee
34. Making sculpture was the primary work of
- Raphael
 - Modigliani
 - Toulouse-Lautrec
 - El Greco
 - Branchusi

35. Collages were made by
a. Braque
b. Titian
c. Frank Lloyd Wright
d. Raphael
e. Ingres
36. Mobiles are most closely associated with
a. Jean Arp
b. Bruegel
c. Titian
d. Klee
e. Calder
37. Ballerinas are frequently found in the work of
a. Degas
b. Mondrian
c. Calder
d. El Greco
e. Rembrandt
38. Vermeer worked mostly in
a. pastel
b. oil
c. silk screen
d. stone
e. woodcut
39. Michelangelo did numerous works in
a. lithography
b. woodcut
c. mobiles
d. marble
e. pastel
40. Degas is noted for his work in
a. steel
b. wood
c. pastel
d. marble
e. water colour
41. Giotto worked in
a. tempera
b. stone
c. marble
d. wood
e. pastel
42. Which of these men was a famous painter?
a. Brahms
b. Byron
c. Renoir
d. Handel
e. Frost
43. The ceiling of the Sistine Chapel was painted by
a. Leonardo da Vinci
b. Raphael
c. Michelangelo
d. Van Loon
e. the Florentine Monks

44. Renoir was
- a. a French musician
 - b. a French impressionist painter
 - c. a close friend of da Vinci
 - d. the artist who is famous for his paintings of ballerinas
 - e. a French sculptor of the 18th century
45. Rembrandt is associated with
- a. Italy
 - b. France
 - c. Germany
 - d. Holland
 - e. Spain
46. Which of the following was most noted for his woodcuts?
- a. Henri Matisse
 - b. Giotto
 - c. Albrecht Grunewald
 - d. Albrecht Durer
 - e. Peter Paul Rubens
47. Order the following periods from earliest to most recent:
(1) cubism, (2) impressionism, (3) classicism
- a. 3, 2, 1
 - b. 1, 2, 3
 - c. 1, 3, 2
 - d. 3, 1, 2
 - e. 2, 3, 1
48. Romanesque was
- a. a French painter
 - b. A French sculptor
 - c. the name of a cathedral in France
 - d. a style of architecture
 - e. a Roman architect
49. Only one of the following could be called a modern artist. Which one?
- a. Giotto
 - b. Chardin
 - c. Braque
 - d. Bosch
 - e. Reynolds
50. Michelangelo is associated with
- a. the cubists
 - b. impressionism
 - c. realism
 - d. surrealism
 - e. the Renaissance
51. Picasso is associated with
- a. the Baroque period
 - b. the Rococo period
 - c. the Gothic period
 - d. Cubism
 - e. impressionism
52. Seurat is associated with
- a. the Baroque period
 - b. the Bauhaus
 - c. impressionism
 - d. the Fauves
 - e. surrealism

53. Dali is associated with
- a. cubism
 - b. the Bauhaus
 - c. impressionism
 - d. sculpture
 - e. surrealism
54. Gothic art was made in the
- a. 19th and 20th centuries
 - b. 16th through the 18th centuries
 - c. 12th through the 15th centuries
 - d. 18th and 19th centuries
 - e. 2nd and through 5th centuries
55. Picasso and Matisse worked in the
- a. 18th century
 - b. 20th century
 - c. 17th century
 - d. pre-Gothic period
 - e. late Gothic period
56. Which of the following is living and painting today?
- a. Renoir
 - b. Picasso
 - c. Raphael
 - d. Watteau
 - e. de Vinci
57. Which art period came before the other four periods listed?
- a. Greek classical
 - b. Rococo
 - c. Neo-classical
 - d. Renaissance
 - e. Baroque
58. The impressionists were
- a. a group of art critics
 - b. a group of architects
 - c. a group of sculptors
 - d. a group of art collectors
 - e. a group of painters
59. The surrealists were
- a. a group of painters
 - b. a group of architects
 - c. a group of fabric designers
 - d. a group of art collectors
 - e. a group of museum owners
60. The Renaissance was
- a. a type of painting method
 - b. a type of canvas
 - c. a group of men
 - d. a period in history
 - e. an organization of collectors.

THE EISNER ART ATTITUDE INVENTORY*

I. The following are designed to find out how you feel about certain art activities. You may answer in one of five ways.

1. It's tops! I think it's great.
2. I like it.
3. It's a toss-up. I can take it or leave it.
4. I don't like it very much.
5. It's terrible. I don't like it at all.

	It's tops! I think it's great	I like it	It's a toss-up. I can take it or leave it	I don't like it very much	It's terrible. I don't like it at all
61. to sketch or paint	1	2	3	4	5
62. to draw cartoons	1	2	3	4	5
63. to paint posters	1	2	3	4	5
64. to mold clay or make pottery	1	2	3	4	5
65. to draw illustrations for books	1	2	3	4	5
66. to select paintings for my home	1	2	3	4	5
67. to look at furniture or fabric designs	1	2	3	4	5
68. to design decorative objects, such as lamps or ash trays	1	2	3	4	5
69. to read about great artists and their works	1	2	3	4	5
70. to study or experiment with colors	1	2	3	4	5
71. to study the history of art or architecture	1	2	3	4	5
72. to talk about paintings and sculpture with people who are interested in them	1	2	3	4	5
73. to collect reproductions of paintings	1	2	3	4	5
74. to learn to recognize the work of particular artists	1	2	3	4	5
75. to display my art works so that my classmates and teachers can see what I've done	1	2	3	4	5

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II. The statements below are designed to find out how much you participate, during your free time, in art activities. Next to each sentence there are five choices:

1. Very often 2. Often 3. Occasinnally 4. Seldom 5. Never

	Very often	Often	Occasionally	Seldom	Never
76. I visit art museums	1	2	3	4	5
77. I engage in arts and craft work after school hours	1	2	3	4	5
78. I engage in discussion of art when at home	1	2	3	4	5
79. I read books about art	1	2	3	4	5
80. I make drawings when at home	1	2	3	4	5
81. I make sculpture when at home	1	2	3	4	5
82. I stop to admire the art work in magazines	1	2	3	4	5
83. I go to art museums with my parent(s)	1	2	3	4	5
84. My parent(s) discuss(es) art at home	1	2	3	4	5
85. I think about becoming an artist	1	2	3	4	5
86. I visit student art exhibits	1	2	3	4	5
87. When pictures are displayed in school, I stop to look at them	1	2	3	4	5
88. When I go to the library, I look at art magazines	1	2	3	4	5
89. My parent(s) encourage me to draw and paint at home	1	2	3	4	5
90. I stop to look at modern architecture	1	2	3	4	5

III. The following are statements concerned with how you feel about your own art ability and art classes. Next to the appropriate letter on your answer sheet, blacken the space to indicate whether you:

1. Strongly agree with the statement
2. Agree with the statement
3. Are uncertain about how you feel about the statement
4. Disagree with the statement
5. Strongly disagree with the statement

	I strongly agree	I agree	I am uncertain	I disagree	I strongly disagree
91. My teacher usually thinks my art work is better than my classmates'	1	2	3	4	5
92. When I finish an art project, I usually do not like it	1	2	3	4	5
93. Considering everything, I estimate my talent in art to be well above average	1	2	3	4	5
94. For me, art work is frustrating	1	2	3	4	5
95. If I had my choice, I would take more art courses in school	1	2	3	4	5
96. I usually feel embarrassed when people look at my art work	1	2	3	4	5
97. I know what a painting should look like, but I just can't paint	1	2	3	4	5
98. My art teacher is always criticizing what I do	1	2	3	4	5
99. When I compare my art work to that of others, I generally feel badly	1	2	3	4	5
100. I generally find my art classes to be boring	1	2	3	4	5
101. For my level of art ability, I am doing very well in art	1	2	3	4	5
102. I generally avoid art work when I can	1	2	3	4	5
103. I appreciate art, but I don't like to paint or draw myself	1	2	3	4	5
104. I can never think of anything different to do in my art class	1	2	3	4	5
105. I do all the things the teacher tells me, but I still can't draw	1	2	3	4	5

IV. The following statements are about artists and art works. On your answer sheet, blacken the space which corresponds to a letter indicating that you

1. Strongly agree with the statement
2. Agree with the statement
3. Are uncertain about how you feel about the statement
4. Disagree with the statement
5. Strongly disagree with the statement.

	I strongly agree	I agree	I am uncertain	I disagree	I strongly disagree
106. People who become artists are usually the ones who could not succeed at other, more important tasks in life	1	2	3	4	5
107. Artists should paint pictures the majority of people can understand	1	2	3	4	5
108. It is good to have an appreciation of art, but it is not really very important	1	2	3	4	5
109. Modern art is an important contribution to society	1	2	3	4	5
110. Looking at art work is monotonous	1	2	3	4	5
111. Almost anyone can learn to appreciate art	1	2	3	4	5
112. A person either has a talent for painting or he does not; going to school isn't going to help him much	1	2	3	4	5
113. Artists are usually neurotic people	1	2	3	4	5
114. Outside of professional artists, there is little need to study art	1	2	3	4	5
115. Advances in the field of art are important for a country's progress	1	2	3	4	5
116. Good art is a matter of personal taste	1	2	3	4	5
117. It is possible to become well-educated without studying art	1	2	3	4	5
118. An artist's contribution to society is not as important as that of a scientist	1	2	3	4	5
119. Artists usually lead immoral lives	1	2	3	4	5
120. Knowledge and appreciation of art is important in order to understand our culture	1	2	3	4	5

APPENDIX B

CLASS TIME DEVOTED TO SIXTEEN ART ACTIVITIES

TABLE III

APPROXIMATE TIME (IN PER CENTS) DEVOTED TO SIXTEEN ART ACTIVITIES
FOR THE 1967-68 SCHOOL YEAR IN SIXTEEN ALBERTA SCHOOLS, WITH AN
AVERAGE FOR ALL 62 SCHOOLS

School	Ceramics	Drawing Painting	Building, Construction	Art History	Sculpture	Art Analysis	Graphics	Stitchery, Fabrics
1	0.0	27.6	3.4	0.0	10.3	6.9	0.0	0.0
2	21.7	17.4	6.5	13.0	0.0	0.0	10.9	0.0
3	0.0	18.5	55.6	0.0	7.4	0.0	0.0	0.0
4	0.0	37.7	0.0	13.2	0.0	9.4	0.0	0.0
5	0.0	86.7	0.0	0.0	0.0	5.0	0.0	0.0
6	31.7	39.7	0.0	1.6	0.0	6.3	0.0	0.0
7	16.0	21.3	6.4	0.0	8.5	0.0	10.6	0.0
8	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0
9	6.2	30.8	15.4	3.1	0.0	4.6	15.4	0.0
10	0.0	47.2	0.0	2.2	16.9	2.2	5.6	0.0
11	7.0	31.7	33.1	0.0	10.6	3.5	0.0	0.0
12	20.8	41.7	0.0	10.4	6.2	4.2	6.2	0.0
13	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.7	26.0	11.7	3.9	10.4	5.2	7.8	10.4
15	0.0	10.3	0.0	17.2	10.3	8.6	0.0	0.0
16	0.0	20.6	10.3	4.4	8.8	0.0	7.4	7.4
All 62 Schools	6.26	35.59	4.85	4.55	5.84	4.76	8.00	2.73

TABLE III (CONTINUED)

School	Interior Design	Architecture	Museum Visits	Photography	Cartooning	Design elements principles	Theatre Arts	Other	Total %
1	3.4	3.4	3.4	0.0	0.0	6.9	17.2	17.2	100
2	0.0	0.0	0.0	0.0	6.5	10.9	0.0	13.0	100
3	0.0	0.0	1.9	0.0	5.6	0.0	0.0	11.1	100
4	9.4	15.1	0.0	0.0	0.0	15.1	0.0	0.0	100
5	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	100
6	0.0	0.0	0.0	0.0	7.9	12.7	0.0	0.0	100
7	0.0	0.0	0.0	0.0	10.6	0.0	0.0	26.6	100
8	0.0	0.0	0.0	0.0	6.7	13.3	0.0	0.0	100
9	0.0	4.6	0.0	0.0	0.0	6.2	4.6	9.2	100
10	4.5	4.5	0.0	0.0	5.6	11.2	0.0	0.0	100
11	0.0	0.0	0.0	0.0	3.5	0.0	1.8	8.8	100
12	2.1	2.1	0.0	0.0	0.0	6.2	0.0	0.0	100
13	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	100
14	0.0	0.0	5.2	0.0	0.0	7.8	0.0	0.0	100
15	6.9	6.9	0.0	0.0	5.2	13.8	3.4	17.2	100
16	0.0	1.5	0.0	0.0	0.0	39.7	0.0	0.0	100
All 62 Schools	1.50	1.65	0.12	0.02	3.77	11.78	2.12	6.44	100

APPENDIX C

PERCENTAGE OGIVES, ART INFORMATION

FREQUENCY POLYGONS, MALES-FEMALES, ART INFORMATION

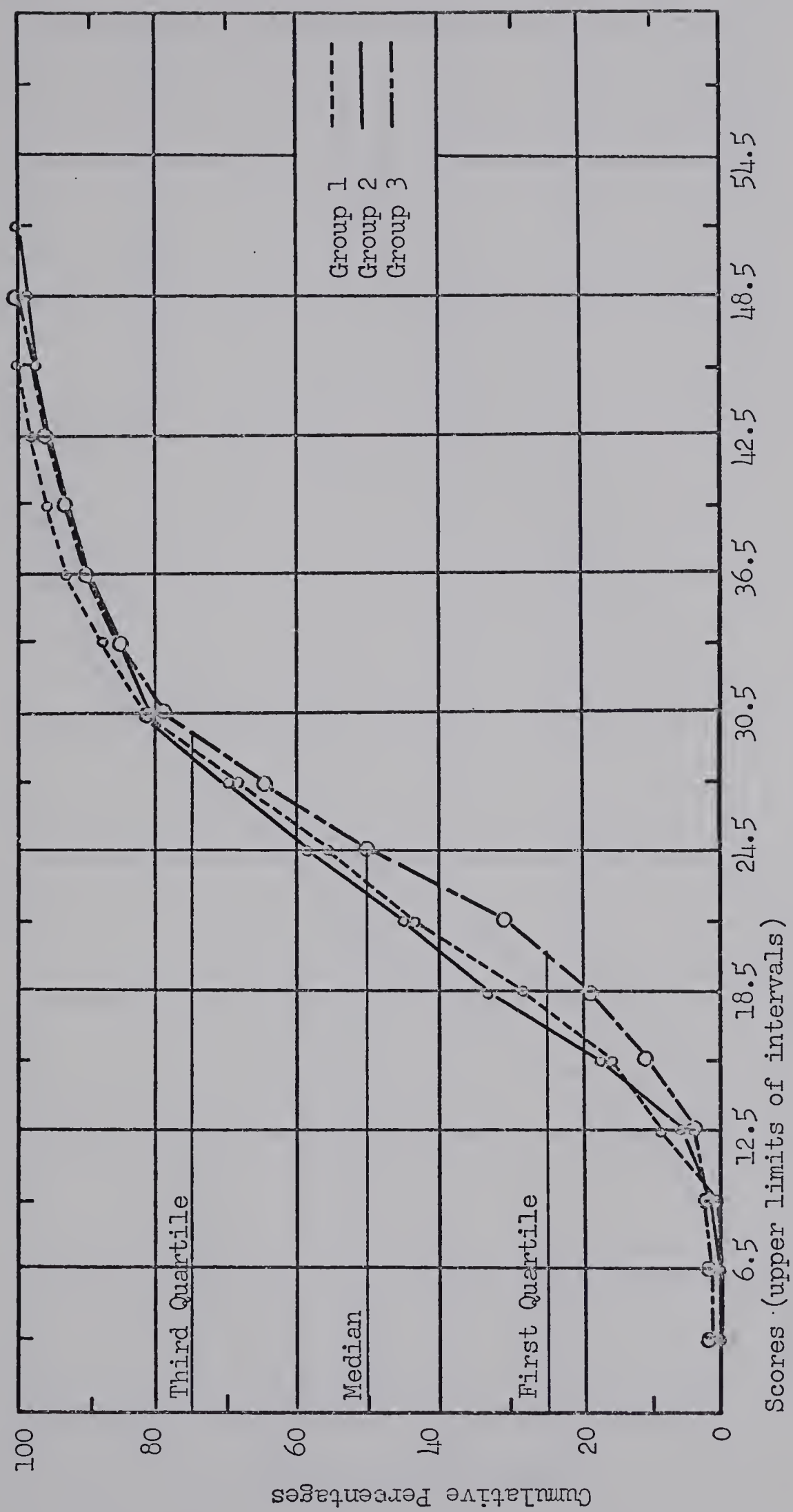


FIGURE 2

CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 1, 2 AND 3, ART INFORMATION

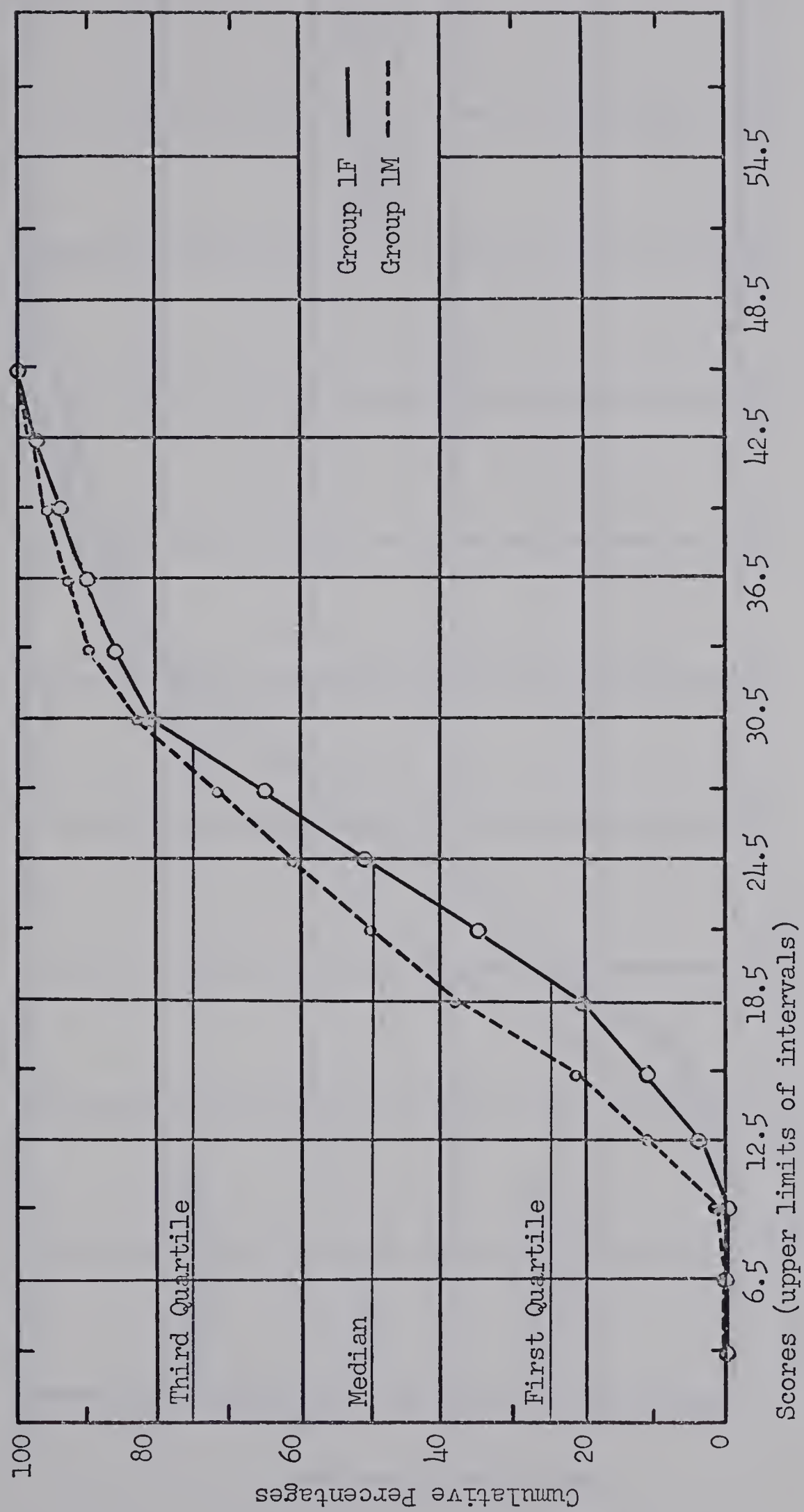


FIGURE 6

CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 1F and 1M, ART INFORMATION

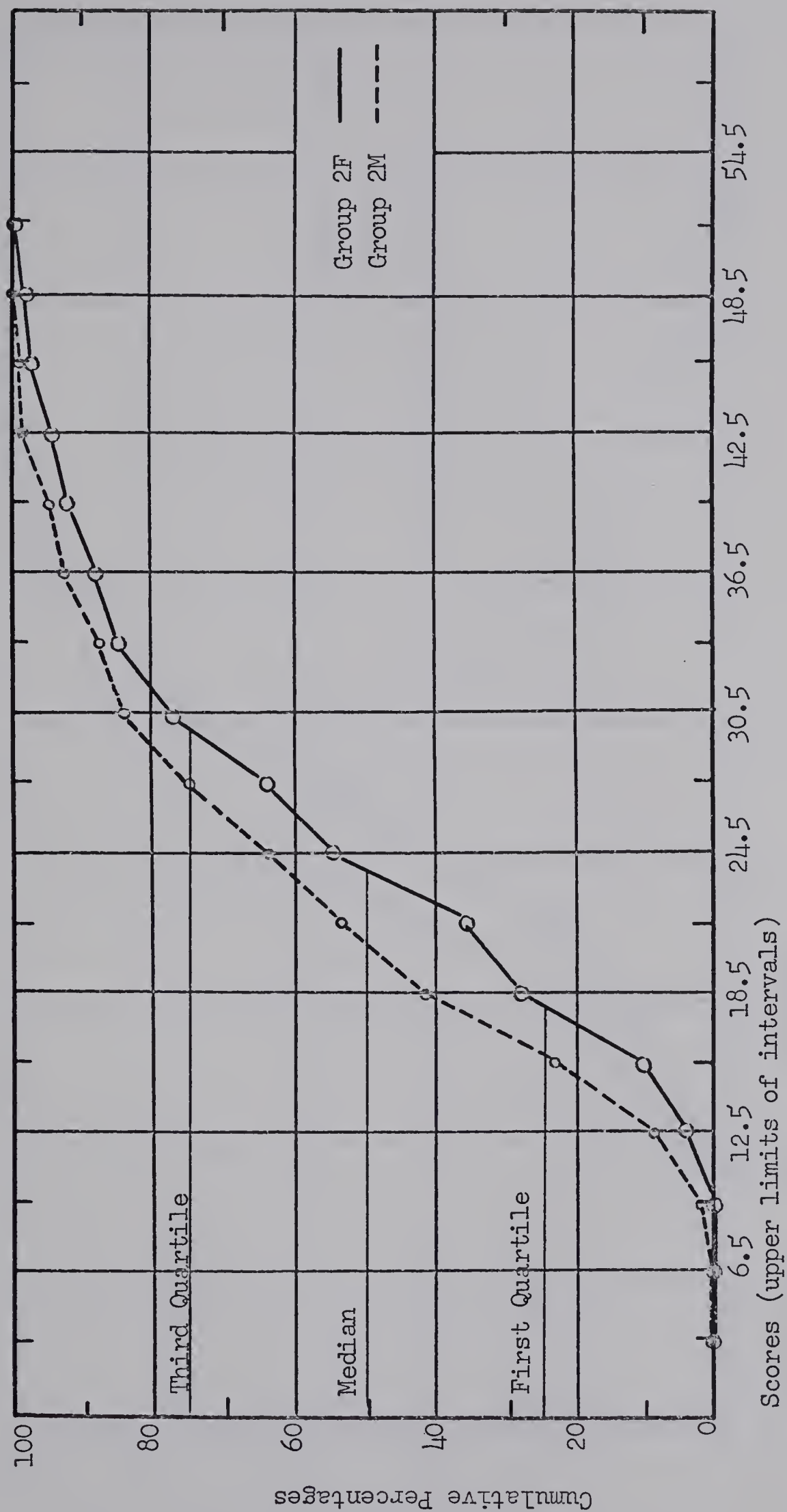


FIGURE 7
CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 2F and 2M, ART INFORMATION

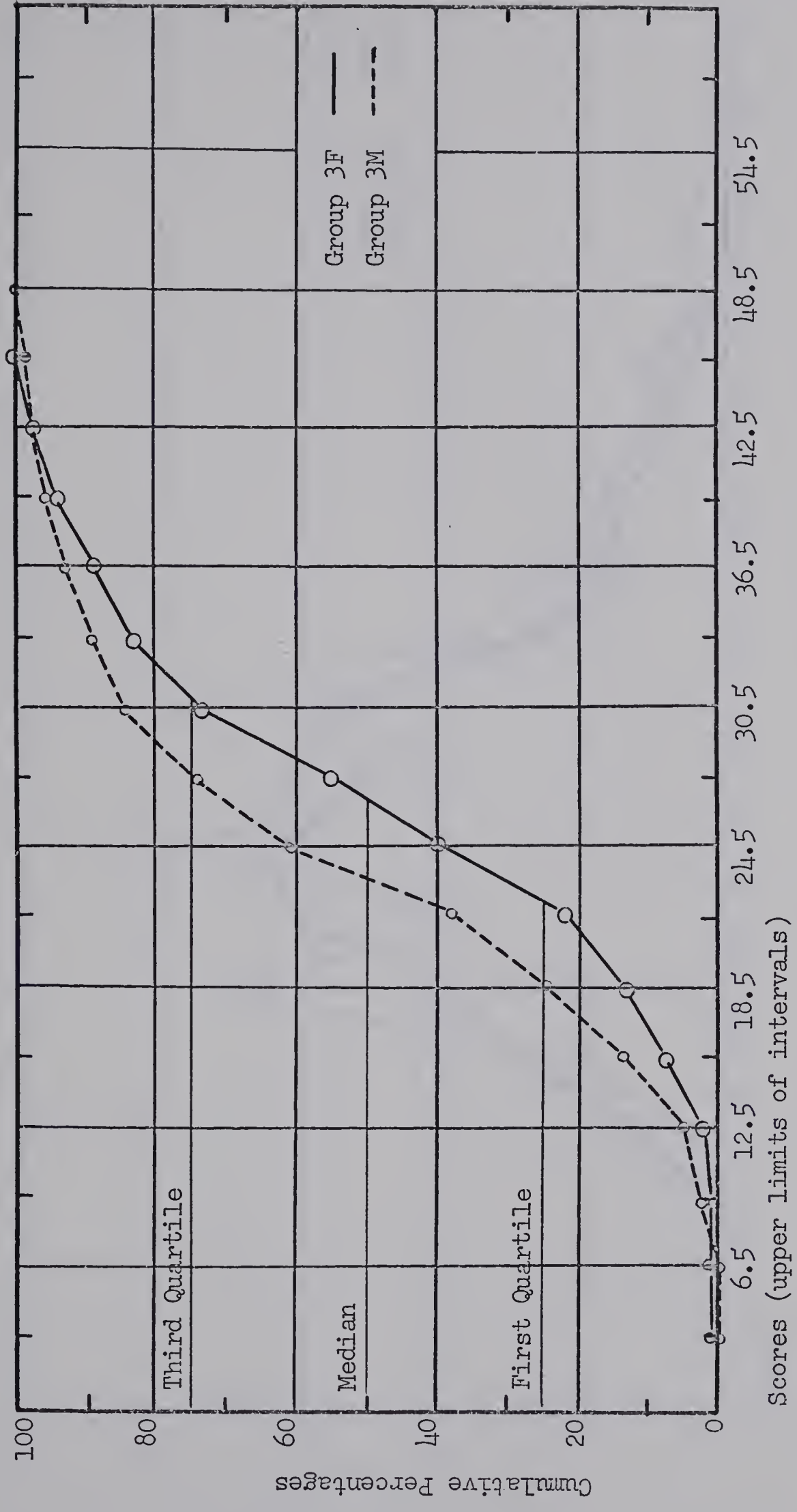


FIGURE 8
CUMULATIVE PERCENTAGE CURVES SHOWING TEST PERFORMANCE
OF GROUPS 3F AND 3M, ART INFORMATION

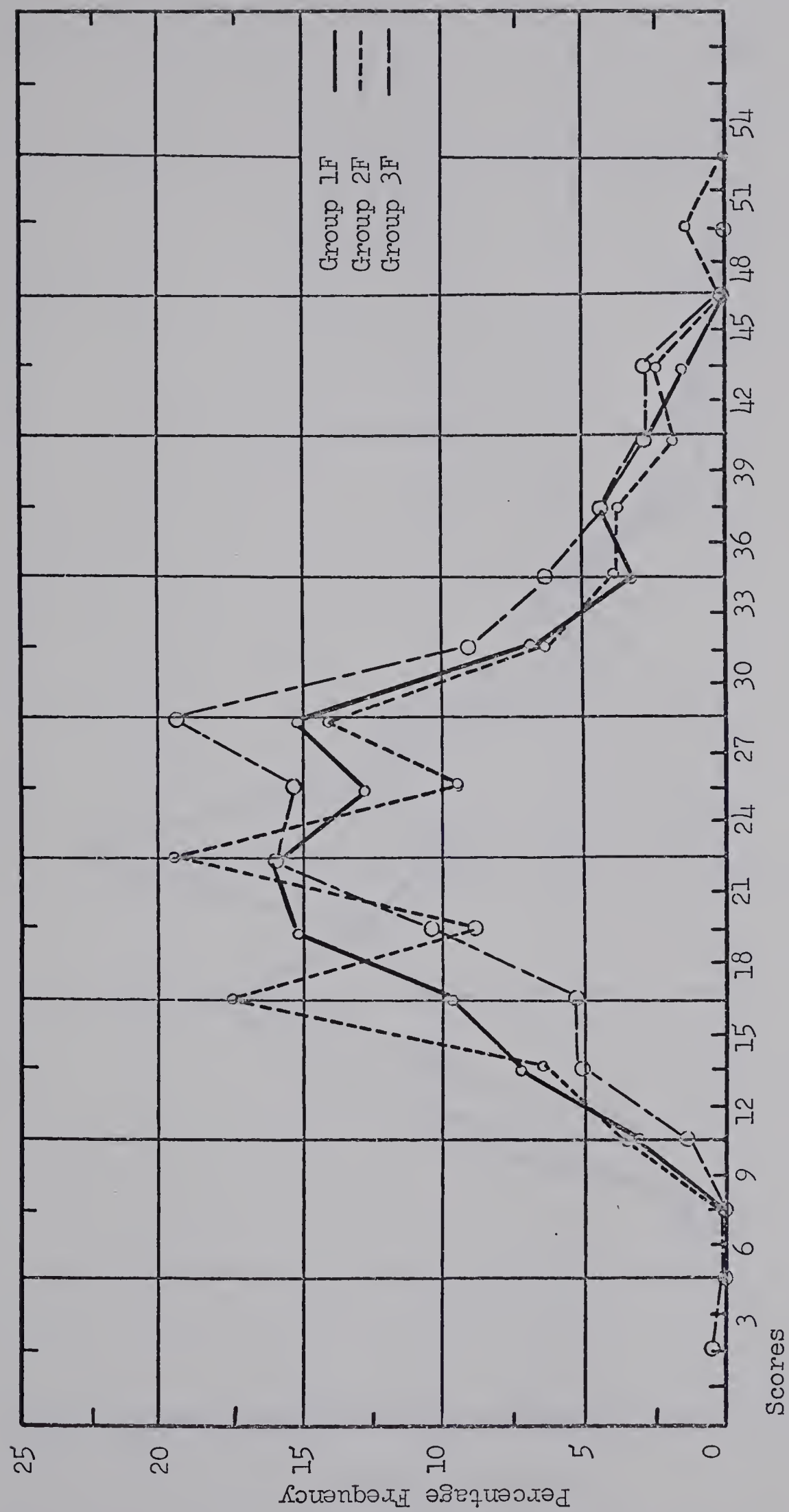


FIGURE 9
DISTRIBUTION OF SCORES FOR GROUPS 1F, 2F AND 3F
ART INFORMATION

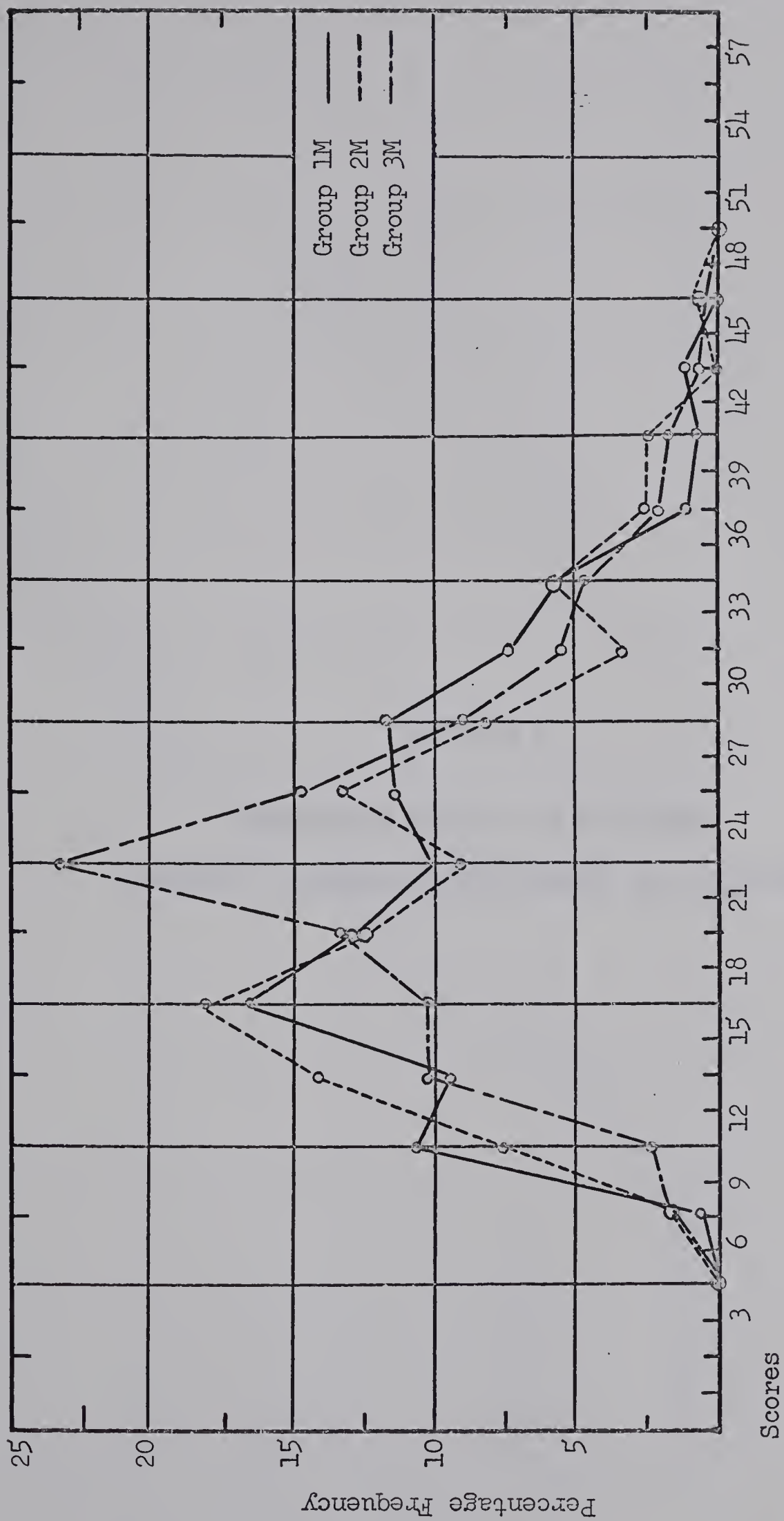


FIGURE 10
DISTRIBUTION OF SCORES FOR GROUPS 1M, 2M and 3M,
ART INFORMATION

APPENDIX D

PERCENTAGE OGIVES, ART ATTITUDES

FREQUENCY POLYGONS, MALES-FEMALES, ART ATTITUDES

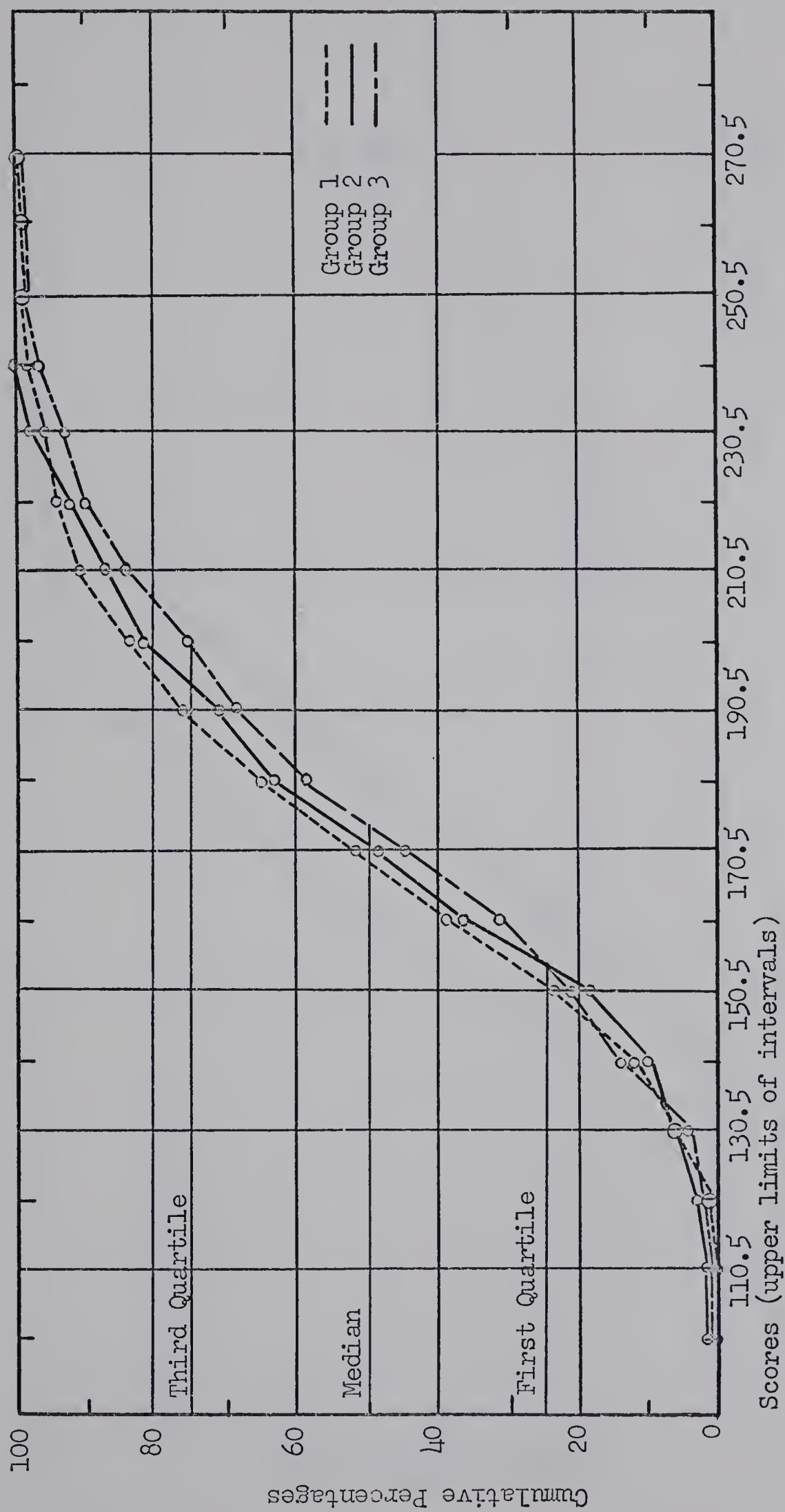


FIGURE 12

CUMULATIVE PERCENTAGE CURVES SHOWING TEST PERFORMANCE
OF GROUPS 1, 2 and 3, ART ATTITUDES

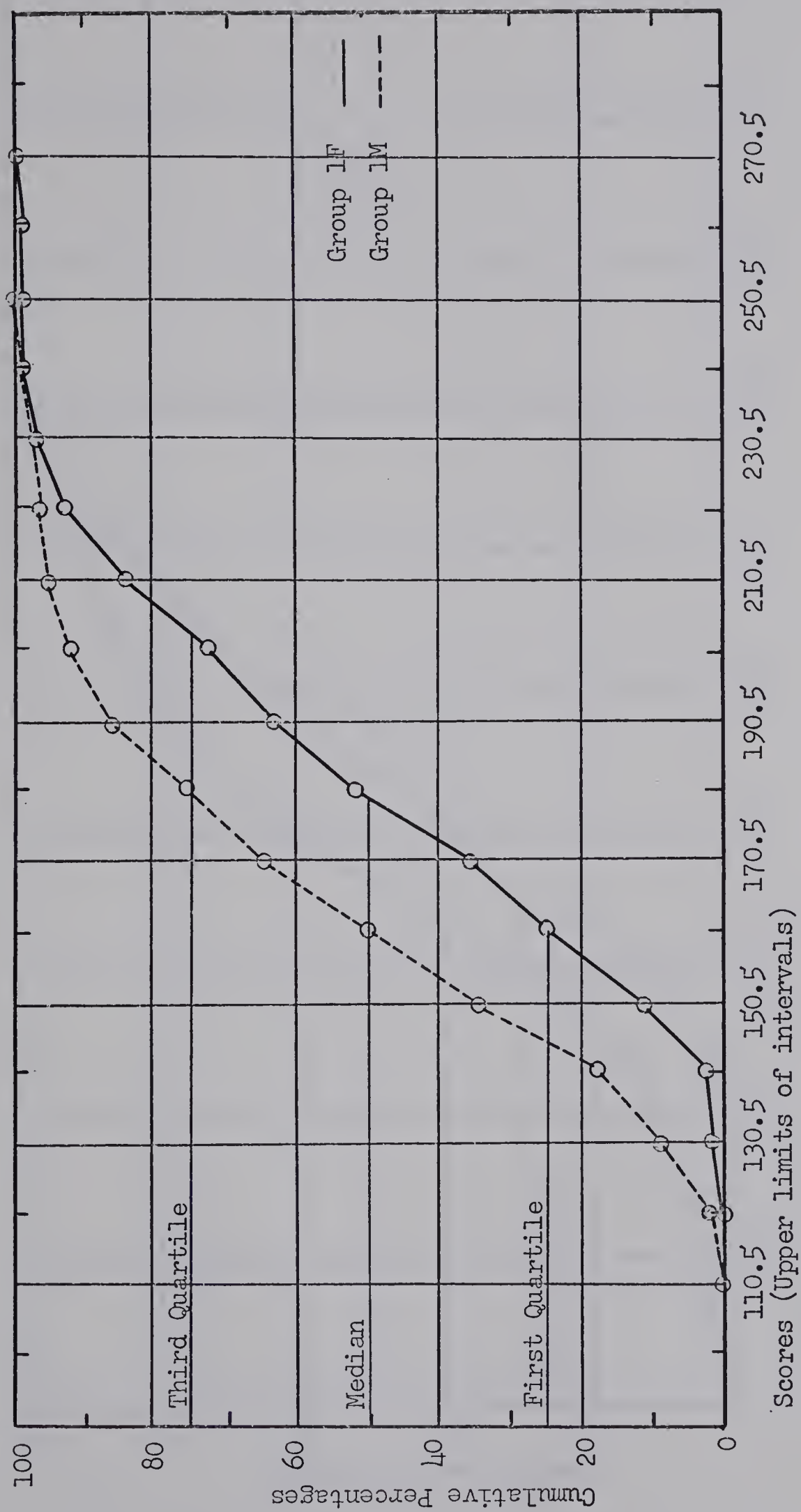


FIGURE 16
CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 1F and 1M, ART ATTITUDES

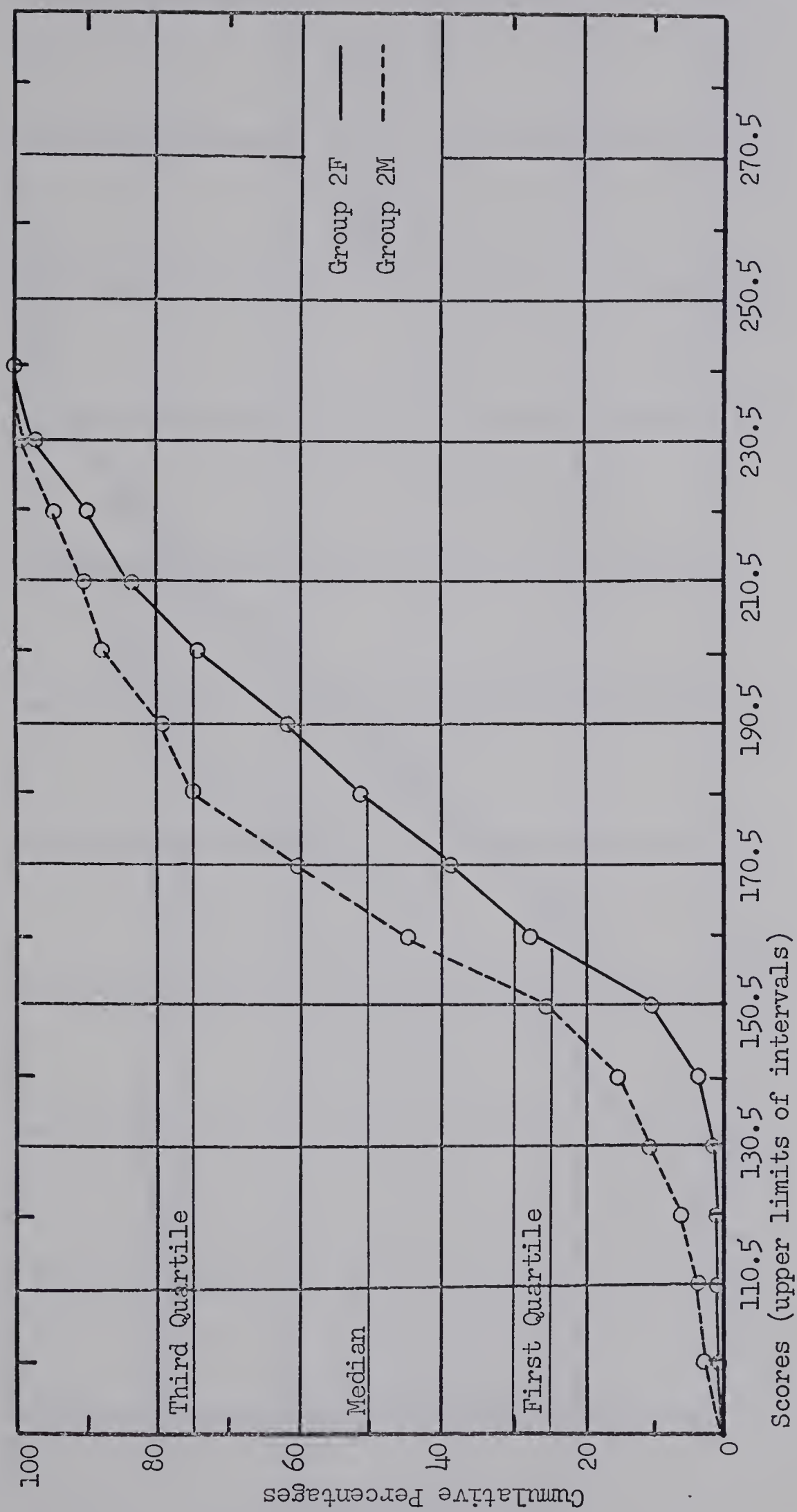


FIGURE 17

CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 2F and 2M, ART ATTITUDES

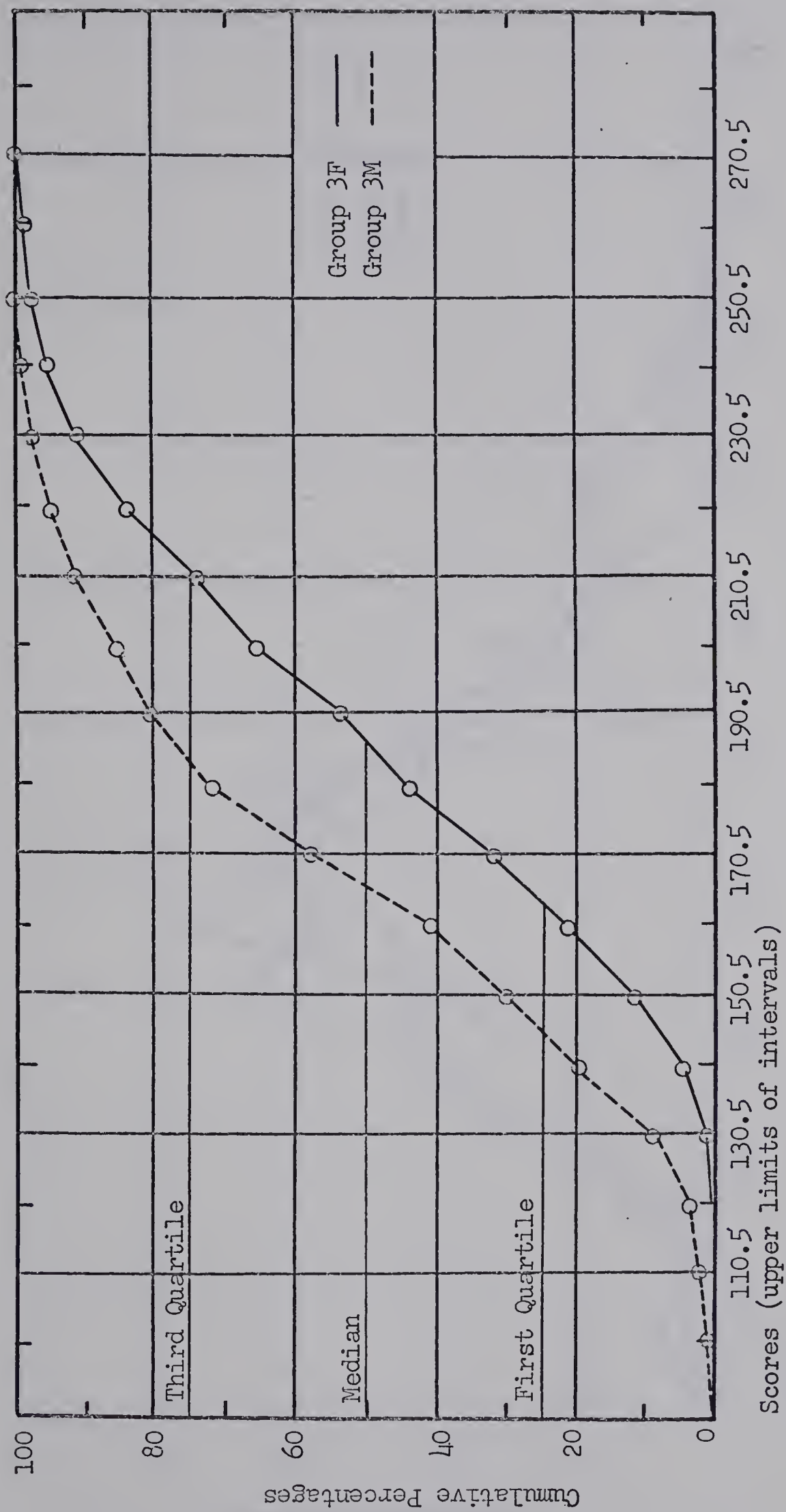


FIGURE 18
CUMULATIVE PERCENTAGE OGIVES SHOWING TEST PERFORMANCE
OF GROUPS 3F and 3M, ART ATTITUDES

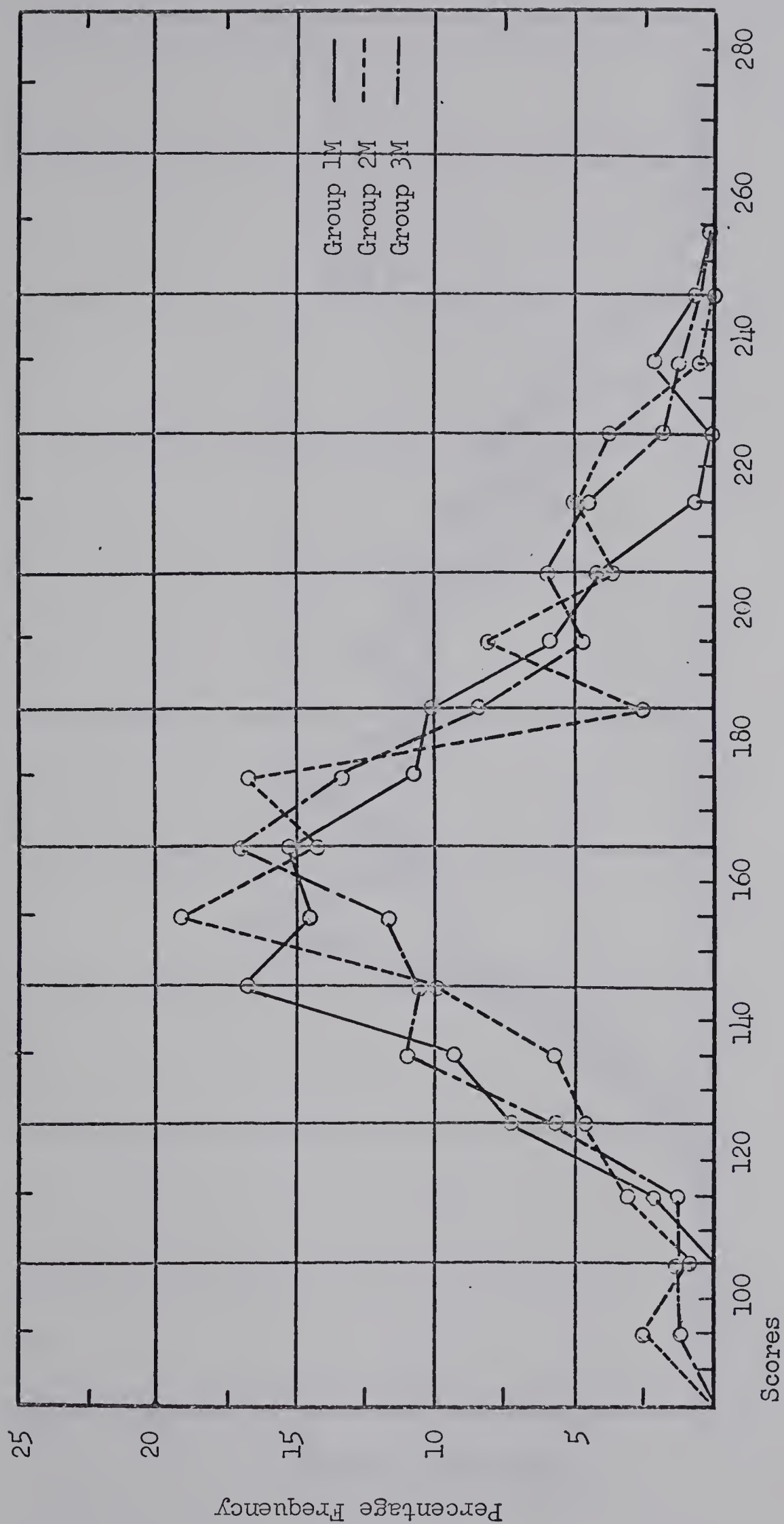


FIGURE 19
DISTRIBUTION OF SCORES FOR GROUPS 1M, 2M AND 3M,
ART ATTITUDES

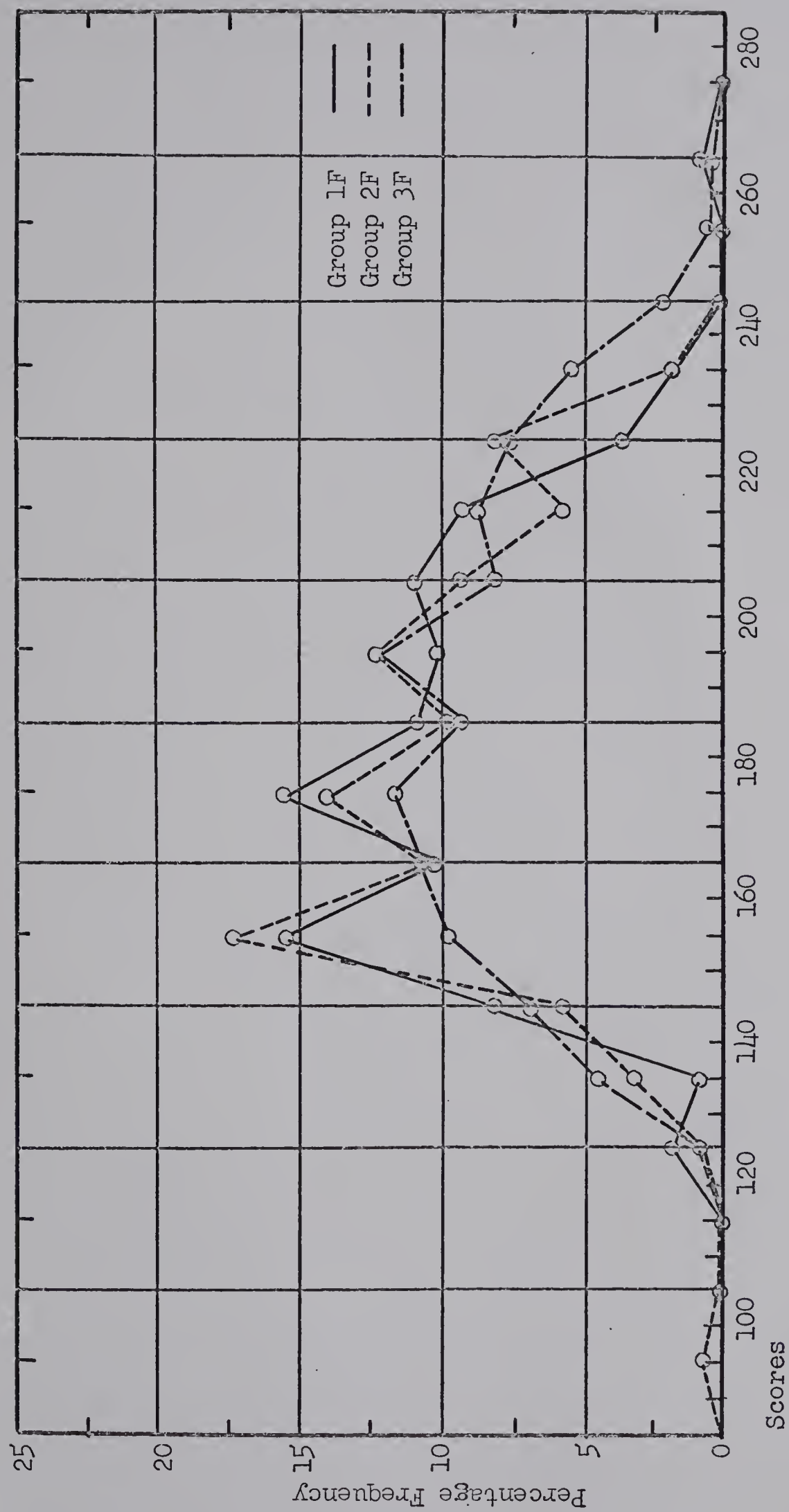


FIGURE 20
DISTRIBUTION OF SCORES FOR GROUPS 1F, 2F and 3F,
ART ATTITUDES

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